

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**AMENDMENT NO. 1
FORM F-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

CureVac B.V.*

(Exact name of Registrant as specified in Its charter)

- (*) We intend to convert the legal form of our company under Dutch law from a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) to a public company (*naamloze vennootschap*) and to change our name from CureVac B.V. to CureVac N.V. prior to the closing of this offering.

Not Applicable

(Translation of Registrant's name into English)

The Netherlands
(State or other jurisdiction of incorporation or organization)

(Primary Standard Industrial Classification Code Number)

Not Applicable
(I.R.S. Employer Identification Number)

**Friedrich-Miescher-Strasse 15, 72076
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(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 7(a)(2)(B) of the Securities Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Proposed maximum aggregate offering price ⁽¹⁾	Amount of registration fee ⁽²⁾
Common shares, par value €0.12 per share	\$100,000,000	\$12,980

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the offering price of additional shares that the underwriters have the option to purchase.

(2) The registrant previously paid a registration fee of \$12,980 in relation to its filing of its initial Registration Statement on Form S-1 (No. 333-240076) on July 24, 2020.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to such Section 8(a), may determine.

Subject to Completion
Preliminary Prospectus dated July 31, 2020

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state or jurisdiction where the offer or sale is not permitted.

P R O S P E C T U S

Shares



Common Shares

CureVac B.V.

to be converted and renamed

CureVac N.V.

(incorporated in the Netherlands)

This is CureVac B.V.'s initial public offering of common shares, €0.12 par value per share.

We expect the public offering price to be between \$ and \$ per common share. This is our initial public offering and no public market currently exists for our common shares. We have applied to list our common shares on The Nasdaq Global Market under the symbol "CVAC."

We are both an "emerging growth company" and a "foreign private issuer" as defined under the U.S. federal securities laws and, as such, will be subject to reduced public company reporting requirements. See "Prospectus Summary — Implications of Being an Emerging Growth Company" and "— Implications of Being a Foreign Private Issuer."

Investing in our common shares involves risks. See "Risk Factors" beginning on page [S-15](#) of this prospectus.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts (1)	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) We refer you to "Underwriting" beginning on page [274](#) of this prospectus for additional information regarding underwriting compensation.

Mr. Dietmar Hopp, managing director of dievini, our majority shareholder, has agreed to purchase €100 million of our common shares at the initial public offering price per share in a private placement transaction that would close concurrently with, and be contingent and conditioned upon consummation of, this offering. The closing of this offering is not conditioned upon the closing of the proposed concurrent private placement. The underwriters will not receive any fees in connection with the sale of our common shares to Mr.Hopp in the concurrent private placement.

The underwriters may also exercise their option to purchase up to an additional common shares from us, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The common shares will be ready for delivery on or about , 2020.

BofA Securities

**Jefferies
Kempn & Co**

Credit Suisse

The date of this prospectus is , 2020.

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We and the underwriters have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide you. We are offering to sell, and seeking offers to buy, common shares only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common shares.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus or any free writing prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common shares and the distribution of this prospectus and any free writing prospectus outside the United States.

ABOUT THIS PROSPECTUS

Unless otherwise indicated or the context otherwise requires, all references in this prospectus to “CureVac” or the “Company,” “we,” “our,” “ours,” “ourselves,” “us” or similar terms refer to (i) CureVac AG, together with its subsidiaries, prior to the completion of the contribution and transfer to CureVac B.V. of all of the outstanding shares of CureVac AG in a capital increase in exchange for newly issued common shares of CureVac B.V., (ii) CureVac B.V., together with its subsidiaries, as of the completion of the contribution and transfer to CureVac B.V. of all of the outstanding shares of CureVac AG in a capital increase in exchange for newly issued common shares of CureVac B.V. and (iii) CureVac N.V., together with its subsidiaries, after giving effect to the conversion of CureVac B.V. into CureVac N.V. See “Corporate Reorganization.”

We are incorporated in the Netherlands, and a majority of our outstanding securities are owned by non U.S. residents. Under the rules of the U.S. Securities and Exchange Commission, or the SEC, we are currently eligible for treatment as a “foreign private issuer.” As a foreign private issuer, we will not be required to file periodic reports and financial statements with the SEC as frequently or as promptly as domestic registrants whose securities are registered under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

We have not authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we may have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters have not authorized any other person to provide you with different or additional information. Neither we nor the underwriters are making an offer to sell the common shares in any jurisdiction where the offer or sale is not permitted. This offering is being made in the United States and elsewhere solely on the basis of the information contained in this prospectus. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of the common shares. Our business, financial condition, results of operations and prospects may have changed since the date on the front cover of this prospectus.

PRESENTATION OF FINANCIAL INFORMATION

We report under International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. We have made rounding adjustments to some of the figures included in this prospectus. Accordingly, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that preceded them.

Our financial statements included in this prospectus are presented in euro and, unless otherwise specified, all monetary amounts are in euro. All references in this prospectus to “\$,” “U.S. dollars” and “dollars” means U.S. dollars and all references to “€” and “euro” mean euro, unless otherwise noted.

In this prospectus, unless otherwise indicated, some euro amounts have been translated into U.S. dollars at the rate of \$1.00 to € , the official exchange rate quoted as of , 2020 by the Federal Reserve Bank of New York.

This prospectus contains the historical financial statements and other financial information of CureVac AG, which is expected to be acquired by CureVac B.V. as a consequence of a capital increase of CureVac B.V. in the context of which the shareholders of CureVac AG will contribute and transfer their shares in CureVac AG as contribution in kind to CureVac B.V. prior to the closing of this offering. CureVac B.V.’s common shares are being offered hereby. CureVac B.V. is a newly incorporated holding company incorporated for the purpose of effecting the offering and has not engaged in any activities except those incidental to its formation, the corporate reorganization and the initial public offering of our common shares. CureVac B.V. has no assets, liabilities or contingent liabilities and will have no assets, liabilities or contingent liabilities until the completion of our corporate reorganization. Following the corporate reorganization, CureVac N.V. will become the holding company of CureVac AG and the historical consolidated financial statements of CureVac AG included in this prospectus will become the historical consolidated financial statements of CureVac N.V. See “Corporate Reorganization.”

TRADEMARKS

We own or have rights to various trademarks and trade names, including CureVac® and the CureVac logo, that we use in connection with the operation of our business. This prospectus may also contain trademarks, service marks and trade names of third parties, which are the property of their respective owners. We do not intend our use or display of other entities' trademarks, trade names or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity. Solely for convenience, the trademarks, trade names and service marks in this prospectus are referred to without the symbols ® and ™, or SM, but the omission of such references should not be construed as any indication that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable owner of these trademarks, service marks and trade names.

MARKET, INDUSTRY AND OTHER DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry, including our general expectations and market position, market opportunity and market size estimates, is based on information from independent industry analysts, third-party sources and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and are based on assumptions made by us based on such data and our knowledge of such industry and market, which we believe to be reasonable. In addition, while we believe the market opportunity information included in this prospectus is generally reliable and is based on reasonable assumptions, such data involves risks and uncertainties and is subject to change based on various factors, including those discussed under the heading "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements."

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary may not contain all the information that may be important to you, and we urge you to read this entire prospectus carefully, including the “Risk Factors,” “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections and our audited consolidated financial statements and notes to those statements, included elsewhere in this prospectus, before deciding to invest in our common shares.

Our Company

We are a global clinical-stage biopharmaceutical company developing a new class of transformative medicines based on messenger ribonucleic acid that has the potential to improve the lives of people. Our vision is to revolutionize medicine and open new avenues for developing therapies by enabling the body to make its own drugs. Messenger ribonucleic acid, or mRNA, plays a central role in cellular biology in the production of proteins in every living cell. We are the pioneers in successfully harnessing mRNAs designed to prevent infections and to treat diseases by mimicking human biology to synthesize the desired proteins. Our technology platform is based on a natural approach to optimize mRNA constructs that encode functional proteins that replace defective or missing proteins using the cell’s intrinsic translation machinery. Our current product portfolio includes clinical and preclinical candidates across multiple disease indications in oncology, prophylactic vaccines and protein therapy. Our lead clinical programs are CV8102, which we are evaluating in a Phase 1 clinical trial for the treatment of four types of solid tumors, and CV7202, which we are currently investigating in a Phase 1 clinical trial for potential vaccination against rabies. We are also rapidly advancing our mRNA vaccine program against coronavirus (SARS-CoV-2), for which we initiated a Phase 1 clinical trial in healthy volunteers in June 2020, with results expected in the fourth quarter of 2020.

mRNA-based medicines represent a novel class of medicine that have the potential to address limitations of conventional treatment modalities. We believe the modular nature of mRNA has the potential for higher efficacy, greater speed and lower cost of production as compared to conventional treatment modalities. We are leveraging the inherent advantages of mRNA-based medicines in the development of our technology platform. We have built an extensive expertise in the fields of mRNA biology, optimization and production. We have continued to invest in developing our proprietary technology platform, which we refer to as the RNAoptimizer, over the past 20 years. We optimize mRNAs to preserve critical protein-RNA interactions as these are an inherent feature of the natural building blocks we employ. Our differentiated technology platform is designed to optimize each component of the mRNA-based medicine. Our RNAoptimizer platform is built on three core pillars:

- **Protein design:** optimizing the specific properties of encoded protein;
- **mRNA optimization:** increasing translation efficacy of the mRNA molecule; and
- **mRNA delivery:** selecting the best-suited delivery system from our diverse portfolio of proprietary and third party delivery systems.

By leveraging each of these pillars, we have observed improved protein expression levels while modulating the interaction with the immune system in preclinical and clinical trials. We continue to invest in all levels of optimization to improve the methods we currently employ and to further advance our mRNA-based medicines.

We consider our manufacturing process an important part of our strategy that allows us to continuously improve our technology platform and maintain flexibility in clinical development. We control the critical steps of manufacturing in-house, which allows us to drive innovation and to maintain flexibility, which allows us to pivot quickly in clinical development and potential commercialization. For other non-critical manufacturing steps, such as starting material, formulation and fill and finish, we rely on contract manufacturing organizations, or CMOs. We currently operate three GMP-certified suites, with the capacity to supply our clinical programs and potential early commercialization activities. We are in the process of building a fourth GMP facility that will support our future commercial launches. Based on the doses and response seen in our CV7202 study, we believe our fourth GMP facility, which is being designed to cover all manufacturing steps from starting material to formulation, could potentially supply materials for billions

of doses of our vaccine product candidates. In addition to our GMP manufacturing facilities, we are developing a novel downsized and automated process for producing our mRNA, which we refer to as the RNA Printer.

Our approach seeks to mitigate clinical and developmental risk across multiple levels to advance and expand our broad product portfolio through rational disease selection. We consider a number of factors in our disease selection process including unmet medical need, immune response, duration of expression, dosing requirements, delivery, and targeted tissue types, among other factors. Our programs target the underlying modes of action of the disease that play a critical role in the pathology of the disease. We are initially targeting diseases that require an active immune response (such as prophylactic vaccines and oncology) and require transient expression of mRNA in tissue types that are more easily accessible. We believe these initial indications are amenable to localized delivery using a lipid nanoparticle, or LNP, delivery system. Following the encouraging results from our initial prophylactic vaccines program in clinical studies and based on our advanced understanding of mRNA biology and immune stimulation control, we have expanded our product portfolio to target indications that require an immune silent approach (such as protein delivery), given the need for higher doses, repeated dosing and longer expression of the protein. These initial indications are using LNP delivery systems, or our proprietary polymer based delivery system, which we refer to as the CureVac Carrier Molecule, or CVCM. Our access to a broad range of delivery systems allows us to target multiple tissue types.

We are exploring a range of potential approaches in oncology including intratumoral therapy and novel cancer vaccines targeting neoepitopes and tumor associated antigens. Our lead oncology candidate, CV8102, is a complex of single-stranded non-coding RNA which has been optimized to maximize activation of cellular receptors that normally detect viral pathogens entering the cells (such as toll-like receptor 7, or TLR7, TLR8, and retinoic acid inducible gene I, or RIG-I pathways), mimicking a viral infection of the tumor. CV8102 is designed to recruit and activate antigen-presenting cells at the site of injection to present tumor antigens released from tumor cells to T cells in the draining lymph node. This potentially leads to activation of tumor specific T cells, which can kill tumor cells at the injected site, but also at distant non-injected tumor lesions or metastases. CV8102 is currently being evaluated in a Phase 1 clinical trial for the treatment of four types of solid tumors — cutaneous melanoma, or cMEL, adenoidcystic carcinoma, or ACC, squamous cell carcinoma of skin, or SCC, and squamous cell carcinoma of head and neck, or HNSCC. As of April 2020, we have enrolled 40 patients (24 in the single agent cohort and 16 in the combination cohort with anti-PD-1) in the Phase 1 dose-escalation portion of the study. As of April 2020, we have observed preliminary evidence of single agent activity with objective tumor responses observed in two melanoma patients, and two additional patients have shown a stabilization of their disease, including shrinkage of non-injected lesions. Overall, eight out of 24 patients treated with single agent CV8102 remained free of progression for at least 24 weeks. Based on the results from the Phase 1 clinical trial, we plan to determine the recommended dose for Phase 2.

Our mRNA technology platform has shown potential in the development and production of prophylactic vaccines against infectious diseases. Our lead vaccine program, CV7202, is being developed for prophylactic vaccination against rabies. CV7202 is an mRNA that encodes the rabies virus glycoprotein, RABV-G, formulated with LNPs. We are currently investigating CV7202 in Phase 1 clinical trial, evaluating safety, including reactogenicity, and immunogenicity. In January 2020, we reported preliminary data from our Phase 1 trial of CV7202 in rabies. CV7202 induced adaptive immune response as shown by rabies-specific virus-neutralizing antibody titers, or VNTs, above the World Health Organization, or WHO, thresholds considered to be protective, after the second dose in all subjects, at the lowest 1 μ g and 2 μ g dose levels. We also showed that the lowest dose levels (1 μ g and 2 μ g mRNA) were generally well tolerated. We plan to report follow up data from our Phase 1 clinical trial in the fourth quarter of 2020 and initiate a Phase 2 clinical trial by mid-2021.

In response to the global pandemic due to novel coronavirus 2019 disease, or COVID-19, we have rapidly advanced our mRNA vaccine program against SARS-CoV-2. Upon publication of the sequence of the novel coronavirus disease (SARS-CoV-2), at the end of January 2020, we designed and optimized a variety of potential antigenic constructs based on the spike (S) protein to elicit high immunogenicity. Early exploratory data on these constructs indicated high immunogenicity and titers of S specific binding and neutralizing antibodies in mice after a single vaccination. The results of our preclinical studies suggested that

our vaccine candidate against SARS-CoV-2 was active at low dose (2µg) and triggered fast induction of a balanced immune response with high levels of VNTs and T-cell responses. Based on the preclinical results, we initiated a Phase 1 clinical trial in healthy volunteers in June 2020, with results expected in the fourth quarter of 2020. We are working closely with many organizations, including the Coalition for Epidemic Preparedness Innovations, or CEPI, on the development of this vaccine candidate. We have also produced material for our vaccine candidate in our GMP III facility in anticipation of clinical trials.

Our development efforts for protein therapy are based on delivering optimized mRNAs to trigger production of antibodies or therapeutic proteins. Based on this “healthy” information delivered by mRNA, our cells can produce proteins, which are required to treat the disease caused by missing or inactive proteins. Protein therapy has the potential to be used as a treatment against infectious diseases and toxins and to be applied in many disease indications including cancer, cardiovascular diseases and autoimmune diseases. In preclinical studies in non-human primates, we have demonstrated that antibodies encoded by mRNA can be produced in hepatocytes very rapidly and can reach therapeutic levels in the blood stream. We are also currently advancing multiple undisclosed programs in preclinical studies across liver and rare diseases, eye disorders, lung diseases as well as delivering therapeutic antibodies.

We have built an intellectual property portfolio in the United States, Europe and other major geographies. Our patent portfolio includes claims relating to our RNA technology platform, our CVCVM delivery system and our CV8102, CV7202, CV-SSIV and SARS-CoV-2 product candidates.

We have a history of partnering with leading biopharmaceutical companies such as Boehringer Ingelheim GmbH, or Boehringer Ingelheim, CRISPR Therapeutics AG, or CRISPR Therapeutics, and Genmab B.V., or Genmab. We also have received research grants from the Bill & Melinda Gates Foundation and CEPI for the development of several prophylactic vaccines. In addition, we have collaborations with the Schepens Eye Research Institute, Harvard Medical School and the Massachusetts Eye and Ear Infirmary, collectively SERI, as well as Yale University. Our approach of partnering with a number of biopharmaceutical companies allows us to execute on a broad range of programs simultaneously, while mitigating our drug development risk.

We are led by a team of veterans with extensive experience in the biopharmaceutical industry, including experience in nucleic acid therapy, oncology, rare and infectious diseases, and antibodies. Our management team as well as our supervisory board members have broad expertise in the clinical, regulatory, and commercialization aspects of oncology, prophylactic vaccines and protein therapy as well as in drug development, process development, and manufacturing for mRNA therapies. We currently have over 450 employees, including over 116 employees with advanced scientific degrees. Since our founding in 2000, we have raised €451 million in gross proceeds from a combination of equity and convertible debt financings with an additional €44 million of external committed financing outstanding.

Our Product Portfolio

Our differentiated mRNA technology platform is designed to address a broad range of diseases across multiple therapeutic areas. Given the strengths of our platform, the broad potential of mRNA-based medicines, and our rational approach to disease selection, we have chosen to leverage our platform to initially focus on advancing our product candidates in the areas of oncology, infectious diseases and protein therapy.

	Programs and Indications	Collaborations	Pre-Clinical Discovery	Pre-Clinical Development	Phase 1	Phase 2	Phase 3	CureVac Commercial Rights*
Oncology Intratumoral TAA	■ CV8102: Cutaneous Melanoma, Adenoidcystic Carcinoma, Squamous Cell Cancer of Skin and Head and Neck		→					Worldwide
	■ BI13618409 (CV9202): Non-Small Cell Lung Cancer		→					Eligible for milestones and royalties
	■ Tumor Associated Antigens (TAA)**		→				Worldwide	
	■ Solid Tumor Program (mRNA Intratumoral Cocktail)**		→				Worldwide	
Prophylactic Vaccines Disruptive Low dose Speed	■ CV7202: Rabies		→					Worldwide
	■ COVID-19	CEPI (3)	→					Worldwide
	■ Lassa, Yellow Fever	CEPI	→				Worldwide	
	■ Respirational Syncytial Virus		→				Worldwide	
	■ Other infectious diseases**		→				Eligible for milestones and royalties	
	■ Diverse Projects (Rota, Malaria, Universal Influenza)		→				Worldwide	
Protein Therapy Rare Disease Gene Editing Antibodies	■ Cas9 Gene-editing**		→					Eligible for milestones and royalties
	■ Liver Metabolic Disorders (Rare Diseases (1), Fibrosis (2))**		→				Worldwide	
	■ Ocular Diseases**		→				Worldwide	
	■ Lung Respiratory Diseases**	Yale	→				Worldwide	
	■ Therapeutic Antibodies**		→				Eligible for milestones and royalties	

* For further details on our collaboration agreements, see “Business — Collaborations” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Our Collaborations and Related License Agreements”

** Unidentified indication.

(1) Undisclosed lysosomal storage disorder using liver as a bioreactor.

(2) Focused on liver-specific metabolic disorders, with the goal to restore the specific enzyme or protein that is deficient in the liver by LNP-mediated delivery of mRNA to the liver.

(3) CEPI has committed to provide funding, which will be used for a Phase 1 clinical trial. See “Business — Collaborations — Coalition for Epidemic Preparedness Innovations Framework Partnering Agreement” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Our Collaborations and Related License Agreements — Coalition for Epidemic Preparedness Innovations”.

Our Strengths

We are developing a broad portfolio of product candidates currently in preclinical or Phase 1 development stages that we believe position us at the forefront of targeted immune active and immune silent mRNA medicines. Our key strengths include:

- We have a differentiated mRNA technology platform that has the potential to address a wide range of diseases.
- We have a broad portfolio of mRNA-based medicines in preclinical or Phase 1 development stages being designed for efficacy, safety and protein expression at relatively low doses.
- We have the ability to target different tissue types based on our delivery systems.
- We have invested in building our in-house manufacturing infrastructure, capabilities and expertise to rapidly, efficiently and cost-effectively produce mRNA-based medicines at commercial scale.

- We have entered into strategic partnerships with leading biopharmaceutical companies and research and non-profit institutions to expand the applications of our technology platform.
- We have built an intellectual property portfolio in a variety of markets for our platform and product candidates.
- We have a long history of mRNA research and development and are led by an experienced management team.

Our Strategy

Our goal is to build a leading, fully integrated mRNA-based medicines company that can transform the lives of people. The key components of our strategy include:

- Continue to invest in our proprietary technology platform to be the leading mRNA platform company.
- Utilize a rational disease selection approach to minimize clinical and commercial risk for our programs and broader platform.
- Rapidly advance our lead product candidates through clinical development and regulatory approval.
- Continue to invest in our manufacturing capabilities across all manufacturing steps from starting material to formulation to further add scale and flexibility for potential commercialization.
- Selectively seek strategic partners to develop and commercialize product candidates in certain therapeutic areas and geographies.
- Seek strategic acquisitions or in-licenses of technology or assets that are complementary to our programs and technology platform.
- Strengthen and expand our intellectual property portfolio to protect our scientific and technical know-how.

Risks Associated with Our Business

All of our product candidates are currently in preclinical or Phase 1 development stages. We have not yet demonstrated an ability to successfully conduct late-stage clinical trials, obtain marketing approvals, manufacture a commercial-scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in the early stages of development, especially clinical-stage biopharmaceutical companies such as ours. Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the “Risk Factors” section of this prospectus immediately following this prospectus summary. These risks include the following:

- the adequacy of our capital resources to successfully complete the development and commercialization of our product candidates, and a failure to obtain additional capital;
- our history of operating losses and our need for additional funding before we can expect to become profitable from the sales of our products;
- we rely on existing strategic partnerships for the funding, research, development and commercialization of our platform and certain of our product candidates, including with Genmab, Arcturus Therapeutics, Inc., or Arcturus, Acuitas Therapeutics Inc., or Acuitas, CRISPR Therapeutics, Boehringer Ingelheim, GlaxoSmithKline Biologicals SA, or GSK, the Bill & Melinda Gates Foundation, CEPI, and Tesla Grohmann Automation GmbH, or Tesla Grohmann, among others; if our partners are unsuccessful in their efforts or chose to terminate their agreements with us, our business will be materially harmed;
- our approach to the discovery and development of product candidates based on mRNA technology is unproven, and we do not know whether we will be able to successfully develop any products;

- clinical drug development is a lengthy and expensive process with uncertain timelines and uncertain outcomes;
- all of our proprietary product candidates are still in preclinical or early clinical development and we cannot give any assurance that any of our product candidates will receive regulatory approval;
- if we are unable to obtain regulatory approval and ultimately commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed;
- to date, no product that utilizes mRNA as a therapeutic or prophylactic vaccine has been approved in the United States or Europe and mRNA drug development has substantial clinical development and regulatory risks due to the novel and unprecedented nature of this new category of medicines;
- the regulatory approval processes of the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, and comparable foreign authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed;
- some of our product candidates are classified as gene therapies by the FDA and the EMA. Even though our mRNA product candidates are designed to have a different mechanism of action from gene therapies, the association of our product candidates with gene therapies could result in increased regulatory burdens, impair the reputation of our product candidates or negatively impact our platform or our business;
- we are developing product candidates for the treatment or prevention of diseases in which there is little clinical experience using new technologies, which means there is increased risk that the FDA, EMA or other regulatory authorities may not consider the endpoints of our clinical trials to provide clinically meaningful results;
- the manufacture of mRNA-based medicines is complex and manufacturers often encounter difficulties in production;
- the timing, receipt, and amount of sales of, or royalties or milestones on, our future products, if any;
- our ability to obtain, maintain, protect and defend our intellectual property, which is difficult and costly;
- concentration of ownership by our principal shareholders may conflict with your interest and may prevent you from influencing significant corporate decisions;
- our ability to develop and commercialize our product candidates without infringing, misappropriating or otherwise violating the intellectual property of third parties;
- we are currently devoting significant resources to the development of a vaccine against COVID-19 and such development may impair our ability to timely progress other product candidates in clinical trials; and
- the recent outbreak of the COVID-19, which may cause business disruptions and could have a material adverse effect on our business plan or clinical trials.

A change in the outcome of any of these variables with respect to the development of any product candidate that we may develop could mean a significant change in the costs and timing associated with the development of such product candidate.

Upon the outbreak of the COVID-19 pandemic, we determined to make the development of a vaccine candidate against COVID-19 a priority and to use our large scale GMP III facility to provide required material for a potential vaccine product candidate. While there is currently no larger production batch required for our other product candidates, this prioritization could impact clinical development of our other product candidates if such a production need arises. Our research personnel dedicated to infectious diseases focused its efforts on optimizing vaccine constructs in preparation of a Phase 1 clinical trial, and this

focus may delay development of other potential infectious disease product candidates. We also postponed initially planned preclinical work on an influenza vaccine to later in 2020. We can provide no assurances that our focus on clinical development of a vaccine candidate against COVID-19 will not adversely impact clinical development of our other product candidates.

Furthermore, the biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. We face and will continue to face competition from third parties that use mRNA, gene editing or gene therapy development platforms and from third parties focused on other therapeutic modalities, such as small molecules, antibodies, biologics and nucleic acid-based therapies. The competition is likely to come from multiple sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions. Many of our potential competitors, alone or with their strategic partners, have substantially greater financial, technical and other resources, such as larger research and development, clinical, marketing and manufacturing organizations. Our commercial opportunity could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approvals for their products faster or earlier than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

2020 Private Investment

On July 17, 2020, we entered into a binding agreement with Kreditanstalt für Wiederaufbau, or KfW, Glaxo Group Limited, Qatar Holding LLC and other investors, pursuant to which we agreed to issue new Series B shares in CureVac AG representing approximately 36% of the shares in CureVac AG in exchange for an aggregate investment of €560 million. As part of the investment, those investors who have subscribed for our Series A, B and C shares, or pre-IPO shareholders, became parties to an Investment and Shareholders' Agreement, as amended, or the ISA. In addition, we entered into a relationship agreement with KfW and dievini, and KfW entered into a separate shareholders' agreement with dievini and Mr. Hopp pursuant to which, among others, Mr. Hopp has agreed to purchase an aggregate of €100 million of our common shares in a concurrent private placement at a price per share equal to the public offering price in this public offering. Pursuant to the ISA, we also agreed to enter into a registration rights agreement with certain shareholders prior to the consummation of this offering. Such agreements are further described under the "Related Party Transactions." We refer to the investment of KfW as the KfW Investment, the investment by Glaxo Group Limited as the GSK Investment and the KfW Investment and GSK Investment, together with the other concurrent investments, the 2020 Private Investment.

We are obligated to use the funds raised in the 2020 Private Investment solely to fund the (i) development of our proprietary pipeline, including earlier stage assets currently in preclinical development, (ii) research and development activities to expand our mRNA platform technology, in particular with respect to our vaccine candidate against SARS-CoV-2 and other infectious diseases and (iii) manufacturing capacities for mRNA-based drug product candidates and products.

GlaxoSmithKline Collaboration Agreement

As part of the GSK Investment we also agreed to enter into a collaboration agreement with GSK pursuant to which we will collaborate with GSK to research, develop and commercialize prophylactic and therapeutic non-replicating mRNA-based vaccines and antibodies targeting infectious disease pathogens. For further information regarding our collaboration agreement with GSK please refer to the "Business — Collaborations."

Corporate Reorganization

We were incorporated pursuant to the laws of the Netherlands as CureVac B.V. on April 7, 2020 to become a holding company for CureVac AG. Pursuant to the terms of a corporate reorganization that will be completed prior to the closing of this offering, all of the outstanding shares in CureVac AG will be contributed and transferred to CureVac B.V. in a capital increase in exchange for newly issued common shares of CureVac B.V. and, as a result, CureVac AG will become a wholly owned subsidiary of CureVac B.V.

and the current shareholders of CureVac AG will become the shareholders of CureVac B.V. Prior to the closing of this offering, we intend to convert from CureVac B.V. into CureVac N.V. See “Corporate Reorganization.”

Corporate Information

Our principal executive offices are located at Friedrich-Miescher-Strasse 15, 72076 Tübingen, Germany. Our telephone number at this address is +49 7071 9883 0. Our principal website is www.curevac.com. The information contained on our website is not part of this prospectus.

Implications of Being an Emerging Growth Company

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- a requirement to have only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations disclosure;
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002; and
- to the extent that we no longer qualify as a foreign private issuer, (i) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and (ii) exemptions from the requirements of holding a nonbinding advisory vote on executive compensation, including golden parachute compensation.

We may take advantage of these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earliest to occur of (i) the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; (ii) the date we qualify as a “large accelerated filer” with at least \$700 million of equity securities; (iii) the issuance, in any three-year period, by our company of more than \$1.0 billion in non-convertible debt securities held by non-affiliates; and (iv) the last day of the fiscal year ending after the fifth anniversary of our initial public offering. We may choose to take advantage of some but not all of these reduced burdens. We cannot predict if investors will find our common shares less attractive because we will rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Given that we currently report and expect to continue to report under IFRS as issued by the IASB, we have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required by the IASB. Since IFRS makes no distinction between public and private companies for purposes of compliance with new or revised accounting standards, the requirements for our compliance as a private company and as a public company are the same.

Implications of Being a Foreign Private Issuer

We are also considered a “foreign private issuer.” In our capacity as a foreign private issuer, we are exempt from certain rules under the Exchange Act that impose certain disclosure obligations and procedural requirements for proxy solicitations under Section 14 of the Exchange Act. In addition, our managing directors, supervisory directors and our principal shareholders are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and the rules under the Exchange Act with respect to their purchases and sales of our common shares. Moreover, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose

securities are registered under the Exchange Act. In addition, we are not required to comply with Regulation FD, which restricts the selective disclosure of material information.

We may take advantage of these exemptions until such time as we are no longer a foreign private issuer. We will remain a foreign private issuer until such time that more than 50% of our outstanding voting securities are held by U.S. residents and any of the following three circumstances applies: (i) the majority of the managing directors or supervisory directors are U.S. citizens or residents; (ii) more than 50% of our assets are located in the United States; or (iii) our business is administered principally in the United States.

We have taken advantage of certain reduced reporting and other requirements in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies.

THE OFFERING

Issuer	CureVac B.V., to be converted into and renamed CureVac N.V. prior to the closing of this offering.
Common shares offered	We are offering common shares.
Underwriters' option to purchase additional common shares	We have granted the underwriters the right to purchase up to an additional common shares from us within 30 days of the date of this prospectus.
Concurrent Private Placement	Mr. Dietmar Hopp, has agreed, concurrently with, and subject to, the completion of this offering, to purchase from us a certain number of common shares with an aggregate value of €100 million at the initial public offering price per share. This purchase will be made by Mr. Hopp pursuant to the concurrent private placement. The closing of this offering is not conditioned upon the closing of the concurrent private placement.
Common shares to be outstanding after this offering	common shares (common shares if the underwriters' option to purchase additional common shares is exercised in full) assuming that we issue and sell common shares to Mr. Hopp in the concurrent private placement.
Voting rights	Our common shares have one vote per share.
Listing	We have applied to list our common shares on The Nasdaq Global Market, or Nasdaq, under the symbol "CVAC."
Use of proceeds	We estimate that the net proceeds to us from the offering will be (i) approximately \$ (\$ if the underwriters' option to purchase additional common shares is exercised in full), assuming an initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus; and (ii) additional net proceeds of €100 million from the concurrent private placement. We currently intend to use the net proceeds from the offering and the concurrent private placement, together with cash and cash equivalents on hand as follows: (i) to advance our lead oncology program, CV8102, through the completion of the Phase 2 clinical trial; (ii) to advance our lead vaccine program, CV7202, through the completion of the Phase 2 clinical trial; (iii) to fund clinical development of our mRNA vaccine program against SARS-CoV-2 through the completion of the Phase 2 clinical trial; (iv) to advance the development of our other preclinical and clinical programs; (v) to invest in further development of our mRNA technology platform; (vi) to fund the expansion of our manufacturing capabilities; and (vii) the remainder for working capital and general corporate purposes. See "Use of Proceeds."
Dividend policy	We have never paid or declared any cash dividends on our common shares and we do not anticipate paying any cash dividends on our common shares in the foreseeable future. We intend to retain all available funds and any future

	<p>earnings to fund the development and expansion of our business. As of the completion of our corporate reorganization, under Dutch law, we may only pay dividends to the extent our shareholders' equity (<i>eigen vermogen</i>) exceeds the sum of the paid-in and called-up share capital plus the reserves required to be maintained by Dutch law or by our articles of association and (if it concerns a distribution of profits) after adoption of the annual accounts by the general meeting from which it appears that such dividend distribution is allowed. Subject to such restrictions, any future determination to pay dividends will be at the discretion of our management board with the approval of our supervisory board and will depend upon a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our management board and supervisory board deem relevant.</p>
Lock-up agreements	<p>We have agreed with the underwriters, subject to certain exceptions, not to offer, sell or dispose of any shares of our share capital or securities convertible into or exchangeable or exercisable for any shares of our share capital during the 180-day period following the date of this prospectus. Our managing directors and our supervisory directors, as well as substantially all of our existing shareholders, have agreed to substantially similar lock-up provisions, subject to certain exceptions.</p>
Risk factors	<p>See "Risk Factors" and the other information included in this prospectus for a discussion of factors you should consider before deciding to invest in our common shares.</p>
Directed share program	<p>At our request, the underwriters have reserved up to _____ common shares, or _____ % of common shares to be offered by this prospectus for sale, at the initial public offering price, through a directed share program. Common shares purchased through the directed share program will not be subject to a lock-up restriction, except in the case of common shares purchased by any of our directors or officers. We do not know if any of these potential investors will choose to purchase all or any portion of the allocated shares, but the number of common shares available for sale to the general public will be reduced to the extent these individuals or entities purchase such reserved common shares. Any reserved common shares that are not so purchased will be offered by the underwriters to the general public on the same basis as the other common shares offered by this prospectus.</p>
	<p>The number of common shares to be outstanding after this offering is based on _____ common shares outstanding as of _____, 2020.</p> <p>Unless otherwise indicated, all information contained in this prospectus assumes:</p> <ul style="list-style-type: none"> • the consummation of the 2020 Private Investment; • the consummation of the concurrent private placement to Mr. Hopp of €100 million at a price per share equal to the public offering price in this public offering;

- the completion, prior to the closing of this offering, of our corporate reorganization, as further described under the section titled “Corporate Reorganization”;
- an initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus;
- no exercise of the option granted to the underwriters to purchase up to additional common shares in connection with the offering; and
- the repayment in full of the convertible loans entered into between us and Mr. Dietmar Hopp, or the Convertible Loans. See “Related Party Transactions — Convertible Loans with Mr. Hopp.”

SUMMARY CONSOLIDATED FINANCIAL INFORMATION

The following summary consolidated statement of operations and comprehensive income (loss) for the years ended December 31, 2018 and 2019 of CureVac AG is derived from the consolidated financial statements included elsewhere in this prospectus, which have been audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, or Ernst & Young.

The following summary interim consolidated statement of financial position as of March 31, 2020 and the summary interim consolidated statement of comprehensive income (loss) for the three months ended March 31, 2019 and 2020 of CureVac AG are derived from the unaudited interim consolidated financial statements included elsewhere in this prospectus. The unaudited interim consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements referred to above and, in the opinion of management, reflect all adjustments necessary to state fairly our financial position as of March 31, 2020 and our results of operations for the three months ended March 31, 2019 and 2020. Our historical results for the three months ended March 31, 2019 and 2020 are not necessarily indicative of results to be expected for a full year or any other interim period. We maintain our books and records in euros, and we prepare our financial statements under IFRS as issued by the IASB.

CureVac B.V. is a newly formed holding company formed for the purpose of effecting the offering and has not engaged in any activities except those incidental to its formation, the corporate reorganization and the initial public offering of our common shares. CureVac B.V. has no assets, liabilities or contingent liabilities and will have no assets, liabilities or contingent liabilities until the completion of our corporate reorganization. Accordingly, summary financial information for CureVac B.V. is not presented. CureVac AG's financial statements, including the notes thereto, are included elsewhere in this prospectus. See "Corporate Reorganization."

This financial information should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements, including the notes thereto, included elsewhere in this prospectus.

	For the Years Ended December 31,		For the Three- Months Ended March 31,	
	2018	2019	2019	2020
(in thousands of euros, except per share amounts)				
			(unaudited)	
Statement of Operations and Comprehensive Income (Loss) Data:				
Revenue	12,871	17,416	3,156	3,119
Cost of sales	(17,744)	(27,983)	(7,558)	(5,475)
Selling and distribution expenses	(1,085)	(1,755)	(198)	(330)
Research and development expenses	(41,722)	(43,242)	(10,862)	(10,902)
General and administrative expenses	(25,289)	(48,969)	(6,887)	(11,495)
Other operating income	808	5,587	732	1,995
Other operating expenses	(663)	(552)	(108)	(127)
Operating loss	(72,824)	(99,498)	(21,725)	(23,216)
Finance income	1,968	833	649	1,041
Finance expenses	(275)	(1,460)	(90)	(1,719)
Loss before income tax	(71,131)	(100,125)	(21,166)	(23,894)
Income tax benefit (expense)	(110)	252	(142)	44
Net loss for the year	(71,241)	(99,873)	(21,308)	(23,850)
Other comprehensive income/loss:				
<i>Items that may be subsequently reclassified to profit or loss</i>				
Foreign currency adjustments	66	32	36	48
Total comprehensive loss for the year	(71,175)	(99,841)	(21,272)	(23,802)

	As of March 31, 2020		
	Actual	Pro Forma ⁽¹⁾	Pro Forma As Adjusted ⁽²⁾⁽³⁾
	(in thousands of euros) (unaudited)		
Statement of Financial Position Data:			
Cash and cash equivalents	43,474		
Total assets	155,656		
Total liabilities	199,313		
Total equity	(43,657)		
<hr/>			
(1)	Pro forma to give effect to (i) the consummation of the 2020 Private Investment, (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million of our common shares at a price per share equal to the public offering price in this public offering, (iii) the repayment in full of the Convertible Loans and (iv) our corporate reorganization.		
(2)	Pro forma as adjusted to give further effect to the issuance and sale of common shares in this offering at the assumed initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, assuming no exercise of the underwriters' option to purchase additional common shares. The as adjusted information presented above is illustrative only and will vary based on the actual public offering price, the actual number of common shares offered by us and the other terms of the offering determined at pricing.		
(3)	Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of cash and cash equivalents, total assets and total equity by \$ million, assuming the number of common shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of common shares we are offering. Each increase (decrease) of 1.0 million in the number of common shares offered by us would increase (decrease) each of cash and cash equivalents, total assets, share capital and total equity by approximately \$ million, assuming no change in the assumed initial public offering price and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.		

RISK FACTORS

You should carefully consider the risks and uncertainties described below and the other information in this prospectus before making an investment in our common shares. Our business, financial condition or results of operations could be materially and adversely affected if any of these risks occurs, and as a result, the market price of our common shares could decline and you could lose all or part of your investment.

This prospectus also contains forward-looking statements that involve risks and uncertainties. See “Cautionary Statement Regarding Forward-Looking Statements.” Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors, including the risks facing our company.

Risks Related to Our Financial Position and Need for Additional Capital

We cannot assure you of the adequacy of our capital resources, including the proceeds from this offering, to successfully complete the development and commercialization of our product candidates, and a failure to obtain additional capital, if needed, could force us to delay, limit, reduce or terminate one or more of our product development programs or commercialization efforts.

As of March 31, 2020, we had cash and cash equivalents amounting to €43.5 million. We believe that we will continue to expend substantial resources for the foreseeable future developing our proprietary product candidates. These expenditures will include costs associated with research and development, conducting preclinical studies and clinical trials, seeking regulatory approvals, as well as launching and commercializing products approved for sale, if any, costs associated with manufacturing products and maintaining manufacturing facilities. In addition, other unanticipated costs may arise. Because the outcomes of our anticipated clinical trials are highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our proprietary product candidates.

Our future funding requirements will depend on many factors, including but not limited to:

- our ability to successfully complete this offering;
- the numerous risks and uncertainties associated with developing product candidates and maintaining our mRNA technology platform;
- the number and characteristics of product candidates that we pursue;
- the rate of enrollment, progress, cost and outcomes of our clinical trials, which may or may not meet their primary end-points;
- the timing of, and cost involved in, conducting non-clinical studies that are regulatory prerequisites to conducting clinical trials of sufficient duration for successful product registration;
- the cost of manufacturing clinical supply and establishing commercial supply of our product candidates;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates if clinical trials are successful;
- the timing of, and costs involved in, conducting post-approval studies that may be required by regulatory authorities;
- the cost of commercialization activities for our product candidates, if any of our product candidates are approved for sale, including product manufacturing, marketing and distribution of product candidates generated from our mRNA technology platform and any other product opportunity for which we receive marketing approval in the future;
- the terms and timing of any collaborative, licensing and other arrangements that we are currently party to or may establish, including any required milestone and royalty payments thereunder and any non-dilutive funding that we may receive;

- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs, if any, and the outcome of any such litigation;
- the timing, receipt, and amount of sales of, or royalties or milestones on, our future products, if any;
- the costs to recruit and build the organization including key executives needed to transform to a commercial organization; and
- the costs of operating as a public company, including hiring additional personnel.

In addition, our operating plan may change as a result of many factors currently unknown to us. As a result of these factors, we may need additional funds sooner than planned. We expect to finance future cash needs primarily through a combination of public or private equity offerings, strategic collaborations and debt financing. If sufficient funds on acceptable terms are not available when needed, or at all, we could be forced to significantly reduce operating expenses and delay, limit, reduce or terminate one or more of our product development programs or commercialization efforts, which would have a negative impact on our business, prospects, operating results and financial condition.

We have incurred significant losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.

We have incurred significant losses since our inception. Our consolidated net loss for the three-months ended March 31, 2020 and for the year ended December 31, 2019 was €23.9 million and €99.9 million, respectively. As of March 31, 2020, our accumulated deficit €539.8 million. We expect to continue to incur losses in the future as we continue our research and development of, and seek regulatory approvals for, our product candidates and maintain and develop new technology platforms, prepare for and begin to commercialize any approved product candidates and add infrastructure and personnel to support our product development efforts and operations as a public company in the United States. We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and clinical trials and development of our manufacturing technology and we anticipate that our expenses will continue to increase over the next several years as we continue these activities. The net losses and negative cash flows incurred to date, together with expected future losses, have had, and likely will continue to have, an adverse effect on our shareholders' deficit and working capital. The amount of future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue.

Because of the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. For example, our expenses could increase if we are required by the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or other regulatory agencies to perform trials in addition to those that we currently expect to perform, or if there are any delays in completing our currently planned clinical trials, the partnering process for our proprietary product candidates or in the development of any of our proprietary product candidates.

Our revenue to date has been primarily revenue from the license of our proprietary technology platform and from milestone payments for the development of product candidates against targets provided by our collaborators. Our ability to generate revenue and achieve profitability in the future depends in large part on our ability, alone or with our collaborators, to achieve milestones and to successfully complete the development of, obtain the necessary regulatory approvals for, and commercialize, our product candidates and technology platform. This will require us to be successful in a range of challenging activities, including developing product candidates, obtaining regulatory approval for such product candidates, and manufacturing, marketing and selling those product candidates for which we may obtain regulatory approval. We may never succeed in these activities and may never generate revenue from product sales that is significant enough to achieve profitability. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to become or remain profitable could depress our market value and could impair our ability to raise capital, expand our business, develop other product candidates or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

Even if we consummate this offering, we will require substantial additional financing, which may not be available on acceptable terms, or at all. Raising additional capital may cause dilution to our shareholders, including purchasers of common shares in this offering, restrict our operations or require us to relinquish rights to our technology or product candidates.

We expect our expenses to increase in connection with our planned operations and as we become and operate as a public company. To the extent that we raise additional capital through the sale of common shares, convertible securities or other equity securities, your ownership interest may be diluted, and the terms of these securities could include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a common shareholder. In addition, debt financing, if available, may result in fixed payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures, creating liens, redeeming shares or declaring dividends, that could adversely impact our ability to conduct our business. For example, in June 2020, we signed a financing arrangement with the European Investment Bank, or EIB under which EIB agreed to provide us with a line of credit in an amount of up to €75 million. Pursuant to the financing agreement we are subject to several restrictive covenants on our business activities as described in Schedule H of the financing agreement, including limitation on certain merger and acquisition transactions, disposition of certain of certain assets and mandatory maintenance of such assets. See Management's Discussion and Analysis of Financial Condition and Results Of Operations — Liquidity and Capital Resources — European Investment Bank Loan. In addition, securing financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of their attention away from day-to-day activities, which may adversely affect our management's ability to oversee the development of our product candidates.

If we raise additional funds through collaborations or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Our current or future license agreements may also be terminated if we are unable to meet the payment or other obligations under the agreements.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

We have limited financial and managerial resources, and therefore we intend to focus on developing product candidates for specific indications that we believe are most likely to succeed, in terms of both their potential for marketing approval and potential for successful commercialization, if approved. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential.

Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to the product candidate.

We depend on strategic partnerships with other companies to assist in the research, development and commercialization of our platform and product candidates. If our existing or future partners do not perform as expected, if we fail to maintain any of these collaborations or if these collaborations are not successful, our ability to commercialize our product candidates successfully and to generate revenues through technology licensing or otherwise may be materially adversely affected.

We have established strategic partnerships and intend to continue to establish strategic partnerships with third parties to research, develop and commercialize our platform and existing and future product candidates. We have entered into strategic partnerships with Genmab, Arcturus, Acuitas, CRISPR Therapeutics, Boehringer Ingelheim, GSK, the Bill & Melinda Gates Foundation, CEPI and Tesla Grohmann, among others. For certain of these programs, including our collaborations with Genmab, CRISPR Therapeutics, Boehringer Ingelheim and GSK, we will depend on our partners to design and conduct their clinical studies. As a result, we may not be able to conduct these programs in the manner or on the time schedule we currently contemplate, which may negatively impact our business operations. While we have certain contractual rights to information about pre-clinical and clinical developments and results under certain of our collaboration agreements, including our agreements with Genmab, Boehringer Ingelheim, CRISPR Therapeutics and GSK, we cannot be certain that clinical trials conducted in connection with such collaboration programs will be conducted in a manner consistent with the best interests of our business. In addition, if any of these partners withdraw support for these programs or proposed products or otherwise impair their development, our business could be negatively affected. Also, our inability to find a partner for any of our product candidates, may result in our termination of that specific product candidate program or evaluation of a product candidate in a particular indication. Even if we found a partner for one or more of our product candidates, there is no assurance that upon the approval of one or more of such product candidates we will be able to successfully co-commercialize such products.

In addition, our existing licenses and collaboration agreements, including our agreements with Genmab, Arcturus, Acuitas, Boehringer Ingelheim, the Bill & Melinda Gates Foundation, CRISPR Therapeutics, GSK and CEPI, impose, and any future licenses, collaborations or other intellectual property agreements we enter into are likely to impose, various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution and enforcement or other obligations on us. Furthermore, our licenses and collaboration agreements impose, and any future agreement we enter into may also impose, restrictions on our ability to license certain of our intellectual property to third parties or to develop or commercialize certain product candidates or technologies. In spite of our best efforts, our collaborators may conclude that we have breached our obligations under our agreements, in which case, we may be required to pay damages and the collaborator may have the right to terminate the agreement. Any of the foregoing could result in us being unable to develop, manufacture and sell products that are covered by the licensed technology, enable a competitor to gain access to the licensed technology or disrupt our right to receive funding or milestone or royalty payments. See “Business — Collaborations.”

In the future, we may enter into additional collaborations to fund our development programs or to gain access to sales, marketing or distribution capabilities. Under certain of our collaboration agreements, including our collaborations with Genmab, CRISPR Therapeutics, Boehringer Ingelheim and GSK, we grant our partners an exclusive license to develop and commercialize certain classes of products containing our mRNA technology for specific targets and receive license fees, research and development funding, milestone payments and/or, if a product is approved for marketing, sales royalties in return. Following the discovery and preclinical testing phase, in certain cases, our partners are solely responsible for the further development of the product candidate and therefore exercise full control over its further development and potential commercialization. In certain cases, including under our collaboration with Genmab, we have a limited right to co-commercialize collaboration products. While certain of our existing licenses and collaboration agreements, including our agreements with Genmab, Boehringer Ingelheim, CRISPR Therapeutics and GSK, impose development or commercialization obligations on our collaborators, we cannot be certain that our collaboration partners will allocate sufficient resources or attention to our collaboration programs or that they will progress our collaboration programs consistent with the best interests of our business. Our existing collaborations, and any future collaborations we enter into, therefore may pose a number of risks, including the following:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to these collaborations;

- collaborators may not perform their obligations as expected by us or by health authorities, such as the FDA, the EMA or comparable foreign regulatory authorities;
- collaborators may dissolve, merge, be bought or may otherwise become unwilling to fulfill the initial terms of the collaboration with us;
- collaborators may fail to perform their obligations under the collaboration agreements or may be slow in performing their obligations;
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities or the actual or perceived competitive situation in a specific indication;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or may require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, licensors or licensees, including disagreements over proprietary rights, contract interpretation and breach of contract claims, payment obligations or the preferred course of development, might cause delays or termination of the research, development or commercialization of products or product candidates, might lead to additional responsibilities, including financial obligations for us with respect to products or product candidates, or delays or withholding of any payments due or might result in litigation or arbitration, any of which would be time consuming and expensive, and could limit our ability to execute on our strategies;
- collaborators may not properly obtain, maintain, enforce or defend our intellectual property or may use our proprietary information in such a way that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation; and
- collaborators may infringe, misappropriate or otherwise violate the intellectual property of third parties, which may expose us to litigation and potential liability.

If our collaborations on research and development candidates do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our product candidates could be delayed and we may need additional resources to develop our proprietary product candidates. Moreover, our relationships with our partners may divert significant time and effort of our scientific staff and management team and require effective allocation of our resources to multiple internal and collaborative projects. All of the risks relating to product development, regulatory approval and commercialization described in this prospectus also apply to the activities of our program collaborators.

Additionally, subject to its contractual obligations to us, if one of our collaborators is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization

of any product candidate licensed to it by us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators in a timely manner. For more information on our current collaboration agreements, see “Business — Collaborations.”

Risks Related to the Development, Clinical Testing and Commercialization of Our Product Candidates

Our approach to the discovery and development of product candidates based on mRNA is unproven, and we do not know whether we will be able to successfully develop any products.

We focus on delivering mRNA encoding functional versions of proteins into cells without altering the underlying DNA. Our future success depends on the successful development of this novel therapeutic or vaccine approach. Relatively few mRNA-based product candidates have been tested in animals or humans, and the data underlying the feasibility of developing mRNA-based products are both preliminary and limited. As of the date of this prospectus, we are not aware of any product that utilizes mRNA as a therapeutic or prophylactic vaccine being approved in the United States or Europe. We have not yet succeeded and may not succeed in demonstrating the efficacy and safety of any of our product candidates in clinical trials or in obtaining marketing approval thereafter. We have completed an interim analysis of safety and immunogenicity in an ongoing Phase 1 clinical trial for our CV7202 (Rabies vaccine) product candidate and have ongoing Phase 1 clinical trials for our CV8102 (cMEL, ACC, SCC and HNSCC) and Phase 1/2 clinical trials for BI 1361849 (former CV9202) (Non-Small-Cell Lung Cancer, or NSCLC) product candidates. We have not yet completed any late-stage clinical studies. As such, there may be adverse effects from treatment with any of our current or future product candidates that we cannot predict at this time.

As a result of these factors, it is more difficult for us to predict the time and cost of product candidate development, and we cannot predict whether the application of our technology platform, or any similar or competitive mRNA platforms, will result in the development and regulatory approval of any products. There can be no assurance that any development problems we experience in the future related to our technology platform or any of our research programs will not cause significant delays or unanticipated costs, or that such development problems can be solved. Any of these factors may prevent us from completing our preclinical studies or any clinical trials that we may initiate or commercializing any product candidates we may develop on a timely or profitable basis, if at all.

Clinical drug development involves a lengthy and expensive process with uncertain timelines and uncertain outcomes, and results of earlier studies and trials may not be predictive of future trial results. If clinical trials of our product candidates or production of our product candidates are prolonged or delayed, we may be unable to obtain required regulatory approvals, and therefore be unable to commercialize our product candidates on a timely basis or at all.

Our business is dependent on the successful development, regulatory approval and commercialization of product candidates based on our technology platform. If we and our collaborators are unable to obtain approval for and effectively commercialize our product candidates, our business would be significantly harmed. Even if we complete the necessary preclinical studies and clinical trials, the marketing approval process is expensive, time-consuming and uncertain, and we may not be able to obtain approvals for the commercialization of any product candidates we may develop.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, we must demonstrate through extensive preclinical studies and clinical trials that our products are safe and effective in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. For example, our Phase 2b clinical trial with CV9104, one of our first generation vaccines based on protamine formulation, that was designed to evaluate the investigational mRNA-based cancer vaccine in patients with asymptomatic or minimally symptomatic metastatic castrate resistant prostate cancer, failed to meet the primary endpoint of improving overall survival despite proceeding through preclinical and Phase 1 studies. Progression-free survival was similar in both arms of the clinical trial. In addition, our past programs with protamine based vaccines (CV9201, CV9103, CV9104 and CV7201) were discontinued because the level of immunogenicity achieved in clinical trials was considered insufficient. BI 1361849 (former

CV9202) is the only protamine based vaccine formulation in current clinical trials. While we have assessed the results of past trials and these have informed our approach going forward, we can provide no assurance that future clinical trials will not be discontinued or fail to meet their specified endpoints. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Our future clinical trial results may not be successful.

Clinical trials must be conducted in accordance with the FDA, EMA and comparable foreign regulatory authorities' legal requirements, regulations or guidelines and are subject to oversight by these governmental agencies and Institutional Review Boards, or IRBs, at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with supplies of our product candidates produced in accordance with current good manufacturing practices, or cGMP, and other requirements. We depend on medical institutions and clinical research organizations, or CROs, to conduct our clinical trials in compliance with good clinical practice, or GCP, standards. While we control the critical steps of manufacturing in-house, we rely on contract manufacturing organizations, or CMOs, to perform non-critical steps of the manufacture and supply of our product candidates, such as starting material, formulation and fill and finish. Failure to follow and document adherence to such regulations or other regulatory requirements may lead to significant delays in the availability of product for our clinical trials, result in the termination of or a clinical hold being placed on one or more of our clinical trials, or delay or prevent submission or approval of marketing applications for our product candidates.

To the extent our CROs fail to enroll participants for our clinical trials, fail to conduct the trial in accordance with GCP requirements or are delayed for a significant time in the execution of trials, including achieving full enrollment, we may be affected by increased costs, program delays or both, which may harm our business. To date, we have not completed clinical trials sufficient for obtaining marketing approvals for any of our product candidates. Our CV7202 (Rabies), BI 1361849 (former CV9202) (NSCLC) and CV8102 (Melanoma, Adenoidcystic Carcinoma, Squamous Cell Cancer of Skin and Head and Neck) product candidates are in clinical development and all other of our product candidates are in the preclinical development stage.

The completion of clinical trials for our clinical product candidates may be delayed, suspended or terminated as a result of many factors, including but not limited to:

- the delay or refusal of regulators or IRBs to authorize us to commence a clinical trial at a prospective trial site and changes in regulatory requirements, policies and guidelines;
- delays or failure to reach agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- delays in patient enrollment and variability in the number and types of patients available for clinical trials, including as a result of COVID-19;
- the inability to enroll a sufficient number of patients in trials to ensure adequate statistical power to detect statistically significant treatment effects;
- negative or inconclusive results, which may require us to conduct additional preclinical or clinical trials or to abandon projects that we expect to be promising;
- shortage of materials required for the production of our product candidates including due to events surrounding COVID-19;
- safety or tolerability concerns causing us to suspend or terminate a trial if it is determined that the participants are being exposed to unacceptable health risks;
- regulators or IRBs requiring that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or safety concerns, among others;
- lower than anticipated retention rates of patients and volunteers in clinical trials;

- our CROs or clinical trial sites failing to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, deviating from the protocol or dropping out of a trial;
- delays relating to adding new clinical trial sites;
- difficulty in maintaining contact with patients after treatment, resulting in incomplete data;
- delays in establishing the appropriate dosage levels;
- the quality or stability of the product candidate falling below acceptable standards;
- the inability to produce or obtain sufficient quantities of the product candidate to complete clinical trials on time, or delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for clinical trials;
- exceeding budgeted costs due to difficulty in accurately predicting costs associated with clinical trials;
- lack of adequate funding to continue the clinical trial;
- developments observed in trials conducted by competitors for related technology that raises general FDA or foreign regulatory authority concerns about risk to patients of gene therapy technology;
- determination that the product will not be producible at the manufacturing stage; and
- transfer of manufacturing processes to larger-scale facilities operated by a CMO or by us, and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process.

Disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting or completing our planned and ongoing clinical trials. We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by a Data Safety Monitoring Board for such trial or by the FDA or comparable foreign regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or comparable foreign regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, changes in regulatory requirements and policies may occur, and we may need to amend clinical trial protocols to comply with these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial.

In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for the product candidates. The FDA, the EMA and comparable foreign regulatory authorities have substantial discretion in the approval process and in determining when or whether regulatory approval will be obtained for any of our product candidates. Even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA, the EMA or any other regulatory authority.

In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, adherence to the dosing regimen and other trial protocols and the rate of dropout among clinical trial participants.

If we are required to conduct additional clinical trials or other testing of our product candidates that we develop beyond the trials and testing that we contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are unfavorable or are only modestly favorable, or if there are safety concerns associated with our other product candidates, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or significant safety warnings, including boxed warnings;
- be subject to additional post-marketing testing or other requirements; or
- remove the product from the market after obtaining marketing approval.

Our product development costs will also increase if we experience delays in testing or receiving marketing approvals and we may be required to obtain additional funds to complete clinical trials. We cannot assure you that our clinical trials will begin as planned or be completed on schedule, if at all, or that we will not need to restructure our trials after they have begun. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which may harm our business and results of operations. In addition, some of the factors that cause, or lead to, clinical trial delays may ultimately lead to the denial of regulatory approval of our product candidates.

Interim, “top-line,” and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data becomes available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose preliminary or top-line data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, top-line data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data becomes available or as patients from our clinical trials continue other treatments for their disease. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock after this offering.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed and result in increased costs and longer development periods or otherwise adversely affected.

We will be required to identify and enroll a sufficient number of patients for our planned clinical trials. Trial participant enrollment could be limited in future trials given that many potential participants may be ineligible because of pre-existing conditions, medical treatments or other reasons. We may not be able

to initiate or continue clinical trials required by the FDA, EMA or other foreign regulatory agencies or any of our other product candidates that we pursue if we are unable to locate and enroll a sufficient number of eligible patients or volunteers to participate in these clinical trials.

Patient enrollment is affected by other factors, including:

- severity of the disease under investigation;
- design of the clinical trial protocol;
- size and nature of the patient population;
- eligibility criteria for the trial in question;
- perceived risks and benefits of the product candidate under trial;
- perceived safety and tolerability of the product candidate;
- proximity and availability of clinical trial sites for prospective patients;
- availability of competing therapies and clinical trials;
- clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including standard-of-care and any new drugs that may be approved for the indications we are investigating;
- efforts to facilitate timely enrollment in clinical trials;
- effects of the COVID-19 pandemic on our clinical trial sites;
- patient referral practices of physicians; and
- our ability to monitor patients adequately during and after treatment.

We also may encounter difficulties in identifying and enrolling such patients with a stage of disease appropriate for our ongoing or future clinical trials. In addition, the process of finding and diagnosing patients may prove costly. Our inability to enroll a sufficient number of patients for any of our clinical trials would result in significant delays or may require us to abandon one or more clinical trials.

We may face business disruption and related risks resulting from of the COVID-19 pandemic, which could have a material adverse effect on our business plan or clinical trials.

The development of our product candidates could be disrupted and materially adversely affected by the COVID-19 global pandemic. The extent to which the COVID-19 pandemic impacts our business will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID-19 and the evolving actions to contain COVID-19 or treat its impact, among others. Site initiation, participant recruitment and enrollment, participant dosing, distribution of clinical trial materials, study monitoring and data analysis may be paused or delayed (or continue to be paused or delayed) due to changes in hospital or university policies, federal, state or local regulations or restrictions, prioritization of hospital resources toward pandemic efforts, travel restrictions, concerns for patient safety in a pandemic environment, or other reasons related to the pandemic. While we have not faced significant delays, patient recruitment for our product candidates may be adversely impacted. For example, our ongoing trials for CV8102 may be delayed as a result of new oncology sites being inaccessible in Europe and the resulting increase in the competition for new patients. In addition, while we have not had any participants withdraw from our clinical trials due to the COVID-19 pandemic, we can provide no assurance that patients will not withdraw from our trials in the future, which could delay our clinical development efforts for the relevant product candidates. Over the period from February to May 2020, sites in France, Italy and Spain were not available for trials. While these sites have resumed screening participants in June 2020, we can provide no assurance that sites will not be inaccessible again. In addition, participants enrolled in our CV7202 clinical trial could not access clinical sites for 3 months for blood draw samples, resulting in the need for us to adapt our clinical protocol to address the timing of site visits.

We are currently devoting significant resources to the development of a vaccine against COVID-19. Although there is no assurance that we will be able to complete development of the vaccine successfully or

in a timely manner, such development may impair our ability to timely progress other product candidates in clinical trials and increases our costs. Upon the outbreak of the COVID-19 pandemic, we determined to make the development of a vaccine candidate against COVID-19 a priority and to use our large scale GMP III facility to provide required material for a potential vaccine product candidate. While there is currently no larger production batch required for our other product candidates, this prioritization could impact clinical development of our other product candidates if such a production need arises. Our research personnel dedicated to infectious diseases focused its efforts on optimizing vaccine constructs in preparation of a Phase 1 clinical trial, and this focus may delay development of other potential infectious disease product candidates. We also postponed initially planned preclinical work on an influenza vaccine to later in 2020. We can provide no assurances that our focus on clinical development of a vaccine candidate against COVID-19 will not adversely impact clinical development of our other product candidates.

Some of our clinical trial sites are located in countries, such as Spain and Italy, which have experienced a shortage of medical staff due to the COVID-19 pandemic. In the event that clinical trial sites are adversely impacted or closed to enrollment in our trials, such impacts or closures could have a material adverse effect on our clinical trial plans and timelines. We may face difficulties enrolling or retaining patients in our ongoing and planned clinical trials if patients are affected by the virus or are fearful of visiting or traveling to our clinical trial sites because of the pandemic. In addition, due to the disruption of the pandemic to the global business outlook, we may face a shortage in the supply of materials that are necessary for the production of our product candidates. We cannot predict whether we will be able to continue to enroll new patients in our clinical trials, whether the clinical sites will continue to operate in a reduced capacity for the long term and whether strict restrictions on social distancing and mobility will resume due to a second wave of COVID-19. For example, some countries that recently lifted restrictions imposed due to COVID-19 have reported increasing number of COVID-19 cases and as a result may re-impose restrictions that could delay our clinical trials. Due to the evolving situation with respect to COVID-19, we are unable to predict the long-term consequences of COVID-19 on our business and ability to progress clinical development of our product candidates.

Moreover, if COVID-19 continues to spread, we may experience ongoing disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays in receiving authorization from local regulatory authorities to initiate our planned clinical trials;
- changes in local regulations as part of a response to the COVID-19 pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others, or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- interruptions in preclinical studies due to restricted or limited operations at our research and development laboratory facility;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;

- refusal of the FDA to accept data from clinical trials in affected geographies; and
- interruption or delays to our sourced discovery and clinical activities.

These and other disruptions in our operations and the global economy could negatively impact our business, operating results and financial condition.

In addition, quarantines, travel restrictions, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to COVID-19 or other infectious diseases could impact personnel at third-party manufacturing facilities upon which we rely, or the availability or cost of materials, which could disrupt the supply chain for our product candidates. We have taken a series of actions aimed at safeguarding our employees and business associates, including implementing a work-from-home policy for employees except for those related to our production and laboratory operations, and these arrangements may cause reduced productivity of our employees and/or delays or disruptions of our business operations.

Our suppliers, licensors or collaborators could also be disrupted by conditions related to COVID-19, possibly resulting in disruption to our supply chain, clinical trials, partnerships or operations. If our suppliers, licensors, CMOs, CROs or collaborators are unable or fail to fulfill their obligations to us for any reason, our ability to continue meeting clinical supply demand for our product candidates or otherwise advancing development of our product candidates may become impaired.

The spread of COVID-19 and actions taken to reduce its spread may also materially affect us economically. While the potential economic impact brought by, and during the duration of, COVID-19 may be difficult to assess or predict, there could be a significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity and financial position. COVID-19 and actions taken to reduce its spread continue to rapidly evolve. We continue to assess the impact COVID-19 may have on our clinical trial timelines, our ability to enroll candidates for clinical trials and obtain the materials that are required for the production of our product candidates, but there can be no assurance that this assessment will enable us to avoid part or all of any impact from the spread of COVID-19 or its consequences. The extent to which COVID-19 and global efforts to contain its spread may impede the development of our product candidates, reduce the productivity of our employees, disrupt our supply chains, delay our clinical trials, reduce our access to capital or limit our business development activities, will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section, such as those relating to the timing and results of our clinical trials, our ability to obtain materials that are required for the production of our product candidates, and our financing needs.

All of our proprietary product candidates are still in preclinical or clinical development. We cannot give any assurance that any of our product candidates will receive regulatory approval, and if we are unable to obtain regulatory approval and ultimately commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

All of our proprietary product candidates are still in preclinical or early clinical development. Although we may receive certain payments from our collaboration partners, including upfront payments, payments for achieving certain development, regulatory or commercial milestones and royalties, our ability to generate revenue from our product candidates’ sales is dependent on receipt of regulatory approval for, and successful commercialization of, such product candidates, which may never occur. Our business and future success is in particular dependent on our ability to develop, either alone or in partnership, successfully, receive regulatory approval for and then successfully commercialize our proprietary product candidates. Each of our product candidates will require additional preclinical and/or clinical development, regulatory approval in multiple jurisdictions, manufacturing supply, substantial investment and significant marketing efforts before we generate any revenue from product sales or royalties. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from applicable regulatory authorities. The success of our product candidates will depend on several factors, including the following:

- successful completion of preclinical and/or clinical studies;

- negative or inconclusive results from our clinical trials, the clinical trials of our collaborators or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical testing or clinical trials or abandon a program;
- successful enrollment of patients in, and completion of, clinical trials;
- strategic commitment to particular product candidates and indications by us and our collaborators;
- receipt of regulatory authorizations from applicable regulatory authorities for future clinical trials;
- receipt of product approvals, including marketing approvals, from applicable regulatory authorities;
- successful completion of all safety studies required to obtain regulatory approval in the United States, the European Union and other jurisdictions for our product candidates;
- obtaining and maintaining patent and trade secret protection or regulatory exclusivity for our product candidates;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others;
- acceptance of the product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage and adequate reimbursement from third-party payors;
- obtaining, maintaining, enforcing and defending intellectual property and intellectual property-related claims;
- maintaining a continued acceptable safety and quality profile of the product candidates following approval; and
- maintaining a continued, sufficient supply of drug substance in acceptable quality.

If we do not achieve one or more of these factors in a complete and timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially adversely affect our business, financial condition, results of operations and prospects and, in case of product candidates, technologies and licenses we have acquired, may result in a significant impairment of assets.

Although we expect to submit biologics license applications, or BLAs, for our mRNA-based product candidates in the United States, and in the European Union, mRNA-based medicines have been classified as gene therapy medicinal products, other jurisdictions may consider our mRNA-based product candidates to be new drugs, not biologics or gene therapy medicinal products, and require different marketing applications. In addition, we have not previously submitted a BLA, to the FDA or similar regulatory approval filings to comparable foreign authorities, for any product candidate, and we cannot be certain that any of our product candidates will be successful in clinical trials or receive regulatory approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to market one or more of our product candidates, our revenues will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval and have commercial rights. If the markets for patient subsets that we are targeting are not as significant as we estimate, we may not generate significant revenues from sales of such products, if approved.

We plan to seek regulatory approval to commercialize our product candidates both in the United States and the EU, and potentially in additional foreign countries. While the scope of regulatory approval is similar in other countries, to obtain separate regulatory approval in many other countries, we must comply

with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our product candidates, and we cannot predict success in these jurisdictions.

We have no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability.

We commenced operations in 2000 and have a long track record of performing clinical trials with multiple product candidates since 2008. Our operations to date have been limited to establishing our company, raising capital, developing our proprietary mRNA technology platform, identifying and testing potential product candidates and conducting clinical trials. We have not yet demonstrated an ability to successfully conduct late-stage clinical trials, obtain marketing approvals, manufacture a commercial-scale product, or arrange for a third-party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in the early stages of development, especially clinical-stage biopharmaceutical companies such as ours. Any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing pharmaceutical products.

We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. We will eventually need to transition from a company with a development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

Our product candidates may cause undesirable side effects that could delay or prevent their regulatory approval, limit the commercial profile of an approved label or result in significant negative consequences following regulatory approval, if any.

Undesirable side effects that may be caused by our product candidates could cause us, our collaboration partners or the regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, EMA or comparable foreign regulatory authorities. Results of our trials could reveal a high and unacceptable severity and prevalence of side effects. In such an event, our trials could be suspended or terminated and the FDA, EMA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. The product-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Clinical trials assess a sample of the potential patient population. With a limited number of patients and duration of exposure, rare and severe side effects of our product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate. If our product candidates receive regulatory approval and we or others identify undesirable side effects caused by such product candidates (or any other similar products) after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approval of such product candidates and require us to take our approved product(s) off the market;
- regulatory authorities may require the addition of labeling statements, such as a “boxed” warning or a contraindication, or submission of field alerts to physicians and pharmacies;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;

- we may be required to change the way such product candidates are distributed or administered, conduct additional clinical trials or change the labeling of the product candidates;
- actual or potential drug-related side effects could negatively affect patient recruitment or the ability of enrolled patients to complete a trial for our products or product candidates;
- market acceptance of our products by patients and physicians may be reduced and sales of the product may decrease significantly;
- regulatory authorities may require a Risk Evaluation and Mitigation Strategy, or REMS, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools;
- we may be subject to regulatory investigations and government enforcement actions;
- we may decide or be required to remove such product candidates from the marketplace;
- we could be sued and potentially held liable for injury caused to individuals exposed to or taking our product candidates;
- sales of the product(s) may decrease substantially; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidates and could substantially increase the costs of commercializing our product candidates, if approved, and therefore could have a material adverse effect on our business, financial condition, results of operations and prospects.

No mRNA product has been approved, and none may ever be approved. mRNA drug development has substantial clinical development and regulatory risks due to the novel and unprecedented nature of this new category of medicines.

As a potential new category of therapeutics, to our knowledge, no mRNA immunotherapies have been approved by the FDA, EMA or other regulatory agency. Successful discovery and development of mRNA-based (and other) products by either us or our collaborators is highly uncertain and depends on numerous factors, many of which are beyond our or their control. Our product candidates that appear promising in the early phases of development may fail to advance, experience delays in the clinic or clinical holds, or fail to reach the market for many reasons, including:

- discovery efforts aimed at identifying potential immunotherapies may not be successful;
- nonclinical or preclinical study results may show product candidates to be less effective than desired or have harmful or problematic side effects;
- clinical trial results may show the product candidates to be less effective than expected, including a failure to meet one or more endpoints or have unacceptable side effects or toxicities;
- manufacturing failures or insufficient supply of GMP materials for clinical trials, or higher than expected cost could delay or set back clinical trials, or make our product candidates commercially unattractive;
- our improvements in the manufacturing processes may not be sufficient to satisfy the clinical or commercial demand of our product candidates or regulatory requirements for clinical trials;
- changes that we make to optimize our manufacturing, testing or formulating of GMP materials could impact the safety, tolerability and efficacy of our product candidates;
- pricing or reimbursement issues or other factors could delay clinical trials or make any immunotherapy uneconomical or noncompetitive with other therapies;
- the failure to timely advance our programs or receive the necessary regulatory approvals, or a delay in receiving such approvals, due to, among other reasons, slow or failure to complete

enrollment in clinical trials, withdrawal by trial participants from trials, failure to achieve trial endpoints, additional time requirements for data analysis, data integrity issues, BLA, MAA or the equivalent application, discussions with the FDA or the EMA, a regulatory request for additional nonclinical or clinical data, or safety formulation or manufacturing issues may lead to our inability to obtain sufficient funding; and

- the proprietary rights, products and technologies of our competitors may prevent our immunotherapies from being commercialized.

Although we expect to submit biologics license applications, or BLAs, for our mRNA-based product candidates in the United States and in the European Union, mRNA-based medicines have been classified as gene therapy medicinal products. Unlike certain gene therapies that irreversibly alter cell DNA and may cause certain side effects, mRNA-based medicines are designed not to irreversibly change cell DNA. Side effects observed in other gene therapies, however, could negatively impact the perception of immunotherapies despite the differences in mechanism. In addition, because no mRNA-based product has been approved, the regulatory pathway in the United States and other jurisdictions for approval is uncertain. The length of time necessary to complete clinical trials and submit an application for marketing approval by a regulatory authority varies significantly from one pharmaceutical product to the next and may be difficult to predict.

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable and if we fail to obtain regulatory approval in any jurisdiction, we will not be able to commercialize our products in that jurisdiction and our business, results of operations, financial condition and prospects, may be materially adversely affected.

The time required to obtain approval by the FDA, EMA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval laws, regulations, policies or the type and amount of clinical data or other information necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate, and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA, EMA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA, EMA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the designs or our execution of clinical trials might not be considered adequate, or the results of clinical trials may not meet the level of statistical significance required, by the FDA, EMA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA, EMA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected may not be sufficient to support the submission of a BLA or other submission, or to obtain regulatory approval in the United States, the European Union or elsewhere;
- the FDA, EMA or comparable foreign regulatory authorities may fail to approve our manufacturing processes or facilities or those of third-party manufacturers with which we contract for clinical and commercial supplies; and

- the laws, regulations or policies of the FDA, EMA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data or other regulatory submissions insufficient for approval.

This lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations and prospects. The FDA, the EMA and other regulatory authorities have substantial discretion in the approval process and determining when or whether regulatory approval will be obtained for any of our product candidates. Even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA, the EMA or any other regulatory authority.

In order to commercialize our products in more than one jurisdiction, we will be required to obtain separate regulatory approvals in each market and to comply with numerous and varying regulatory requirements. The approval procedures vary from country to country and may require additional testing, administrative review periods, agreements with pricing authorities or other steps. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, in many countries outside the United States and in particular in many of the member states of the European Union, a product must undergo health economic assessments to agree on pricing and/or be approved for reimbursement before it can be approved for sale in that country, or before it becomes commercially viable. The FDA and the EMA may come to different conclusions regarding approval of a marketing application. Approval by the FDA or EMA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA or EMA. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. We may not obtain regulatory approvals on a timely basis, if at all. We may not be able to submit applications for regulatory approvals and may not receive necessary approvals to commercialize our products in any market. We may be required to conduct additional preclinical studies or clinical trials, which would be costly and time consuming. If we or any future partner are unable to obtain regulatory approval for our product candidates in one or more significant jurisdictions, then the commercial opportunity for our product candidates, and our business, results of operations, financial condition and prospects, may be materially adversely affected.

The regulatory landscape that will govern our product candidates is uncertain. Regulations relating to more established gene therapy and cell therapy products are still developing, and changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining regulatory approval.

The regulatory requirements to which our product candidates will be subject are not entirely clear. Even with respect to more established products that fit into the categories of gene therapies or cell therapies, the regulatory landscape is still developing. For example, regulatory requirements governing gene therapy products and cell therapy products have changed frequently and may continue to change in the future. Moreover, there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of existing gene therapy products and cell therapy products. Although the FDA decides whether individual gene therapy protocols may proceed, the review process and determinations of other reviewing bodies can impede or delay the initiation of a clinical study, even if the FDA has reviewed the study and authorizes its initiation. Conversely, the FDA can place an Investigational New Drug Application, or IND, on clinical hold even if such other entities have provided a favorable review. Furthermore, gene therapy clinical trials may also require evaluation and assessment by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at the institution participating in the clinical trial. The IBC assesses the safety of the research and identifies any potential risk to the public health or the environment, and such assessment may result in some delay before initiation of a clinical trial. In addition, adverse developments in clinical trials of gene therapy products conducted by others may cause the FDA or other regulatory bodies to change the requirements for approval of any of our product candidates.

Complex regulatory environments exist in other jurisdictions in which we might consider seeking regulatory approvals for our product candidates, further complicating the regulatory landscape. For example, in the European Union a special committee called the Committee for Advanced Therapies, or CAT, was established within the EMA in accordance with Regulation (EC) No 1394/2007 on advanced-therapy medicinal products, or ATMPs, to assess the quality, safety and efficacy of ATMPs, and to follow scientific developments in the field. ATMPs include gene therapy products as well as somatic cell therapy products and tissue engineered products.

These various regulatory review committees and advisory groups and new or revised guidelines that they promulgate from time to time may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. As the regulatory landscape for our product candidates is new, we may face even more cumbersome and complex regulations than those emerging for gene therapy products and cell therapy products. Furthermore, even if our product candidates obtain required regulatory approvals, such approvals may later be withdrawn as a result of changes in regulations or the interpretation of regulations by applicable regulatory agencies.

Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate sufficient product sales revenue to maintain our business.

Even if we receive regulatory approval for any of our product candidates, we will be subject to ongoing obligations and continued regulatory review, which may materially adversely affect our business, prospects, financial condition and results of operations. We have not previously submitted a BLA, to the FDA, or similar regulatory approval filings to comparable foreign authorities, for any product candidate and never received regulatory approval for any of our product candidates. Even if the FDA, EMA or a comparable foreign regulatory authority approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, product sampling, adverse event reporting, storage, advertising, marketing, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and GCPs for any clinical trials that we conduct post-approval, all of which may result in significant expense and limit our ability to commercialize such products. There also are continuing, annual program user fees for any marketed products. Biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing and surveillance to monitor the safety and efficacy of the product. For example, the FDA has the authority to require a REMS as part of a BLA or after approval, which may impose further requirements or restrictions on the distribution or use of an approved product, such as limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory;

- product recalls;
- fines, warning letters, untitled letters or holds on clinical trials;
- refusal by the FDA, EMA or a comparable foreign regulatory authority to approve pending applications or supplements to approved applications, or suspension or revocation of product approvals;
- requirements to conduct additional clinical trials, change our product labeling or submit additional applications or application supplements;
- product seizure or detention, or refusal to permit the import or export of products;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- the issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

In addition, regulatory policies may change or additional government regulations or legislation may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we fail to comply with existing requirements, are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any regulatory approval that we may have obtained or face regulatory or enforcement actions, which may materially adversely affect our business, prospects, financial condition and results of operations.

In addition, if any of our product candidates is approved, our product labeling, advertising and promotion will be subject to regulatory requirements and continuing regulatory review. The FDA strictly regulates the promotional claims that may be made about prescription products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. If we receive marketing approval for a product candidate, physicians may nevertheless prescribe it to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant sanctions. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize our product candidates.

Further, the policies of FDA, EMA and other comparable regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or to adopt new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, FDA's ability to engage in

routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict how these Executive Orders will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

A breakthrough therapy designation by the FDA for a product candidate may not lead to a faster development or regulatory review or approval process, and it would not increase the likelihood that the product candidate will receive marketing approval.

We may in the future seek a breakthrough therapy designation for one or more product candidates. A breakthrough therapy is defined as a product candidate that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the product candidate may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For product candidates that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Product candidates designated as breakthrough therapies by the FDA are also eligible for priority review if supported by clinical data at the time of the submission of the BLA.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe that one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a breakthrough therapy designation for a product candidate may not result in a faster development process, review or approval compared to product candidates considered for approval under conventional FDA procedures and it would not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that the product candidate no longer meets the conditions for qualification or it may decide that the time period for FDA review or approval will not be shortened.

Because we are developing product candidates for the treatment or prevention of diseases in which there is little clinical experience using new technologies, there is increased risk that the FDA, the EMA or other regulatory authorities may not consider the endpoints of our clinical trials to provide clinically meaningful results and that these results may be difficult to analyze.

As we are developing novel treatments and preventative measures for diseases in which we believe there is limited clinical experience with new endpoints and methodologies, there is heightened risk that the FDA, EMA or comparable foreign regulatory bodies may not consider the clinical trial endpoints to provide clinically meaningful results, and the resulting clinical data and results may be more difficult to analyze. It is difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for our product candidates in the United States, the European Union or other jurisdictions, if ever. Further, approvals by one regulatory agency may not be indicative of what other regulatory agencies may require for approval.

During the regulatory review process, we will need to identify success criteria and endpoints such that the FDA, the EMA or other regulatory authorities will be able to determine the clinical efficacy and safety profile of any product candidates we may develop. Because our initial focus is to identify and develop product candidates to treat or prevent diseases in which there is little clinical experience using new technologies, there is heightened risk that the FDA, the EMA or other regulatory authorities may not consider the clinical trial endpoints that we propose to provide clinically meaningful results. In addition, the resulting clinical data and results may be difficult to analyze. Even if the FDA determines that our success criteria is sufficiently validated and clinically meaningful, we may not achieve the pre-specified endpoints to a sufficient degree of statistical significance.

This may be a particularly significant risk for many of the genetically defined diseases for which we plan to develop product candidates because many of these diseases have small patient populations, and designing and executing a rigorous clinical trial with appropriate statistical power is more difficult than with

diseases that have larger patient populations. Further, even if we do achieve the pre-specified criteria, the results may be unpredictable or inconsistent with the results of the non-primary endpoints or other relevant data. The FDA also weighs the benefits of a product against its risks, and the FDA may view the efficacy results in the context of safety as not being supportive of regulatory approval. The EMA and other regulatory authorities may make similar comments with respect to these endpoints and data. Any product candidate we may develop will be based on a novel technology that makes it difficult to predict the time and cost of development and of subsequently obtaining regulatory approval.

We and our collaboration partners have conducted and intend to conduct additional clinical trials for selected product candidates at sites outside the United States, and the FDA may not accept data from trials conducted in such locations or may require additional U.S.-based trials.

We and our collaboration partners have conducted, currently are conducting and intend in the future to conduct, clinical trials outside the United States, particularly in the European Union where we are headquartered.

Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to certain conditions imposed by the FDA. For example, the clinical trial must be conducted by qualified investigators in accordance with GCPs, and the FDA must be able to validate the trial data through an on-site inspection, if necessary. Generally, the patient population for any clinical trial conducted outside of the United States must be representative of the population for which we intend to seek approval in the United States. There can be no assurance that the FDA will accept data from trials conducted outside of the United States. If the FDA does not accept the data from any clinical trials that we or our collaboration partners conduct outside the United States, it would likely result in the need for additional clinical trials, which would be costly and time-consuming and delay or permanently halt our ability to develop and market these or other product candidates in the United States. In other jurisdictions, for instance, in Japan, there is a similar risk regarding the acceptability of clinical trial data conducted outside of that jurisdiction.

In addition, there are risks inherent in conducting clinical trials in multiple jurisdictions, inside and outside of the United States, such as:

- regulatory and administrative requirements of the jurisdiction where the trial is conducted that could burden or limit our ability to conduct our clinical trials;
- foreign exchange fluctuations;
- manufacturing, customs, shipment and storage requirements;
- cultural differences in medical practice and clinical research; and
- the risk that the patient populations in such trials are not considered representative as compared to the patient population in the target markets where approval is being sought.

If any of our product candidates receive regulatory approval, the approved products may not achieve broad market acceptance among physicians, patients, the medical community and third-party payors, in which case revenue generated from their sales would be limited.

The commercial success of our product candidates will depend upon their acceptance among physicians, patients and the medical community. The degree of market acceptance of our product candidates will depend on a number of factors, including:

- limitations or warnings contained in the approved labeling for a product candidate;
- changes in the standard of care for the targeted indications for any of our product candidates;
- limitations in the approved clinical indications for our product candidates;
- demonstrated clinical safety and efficacy compared to other products;
- lack of significant adverse side effects;
- sales, marketing and distribution support;

- availability of coverage and extent of reimbursement from managed care plans and other third-party payors;
- timing of market introduction and perceived effectiveness of competitive products;
- the degree of cost-effectiveness of our product candidates;
- availability of alternative therapies at similar or lower cost, including generic and over-the-counter products;
- whether the product is designated under physician treatment guidelines as a first-line therapy or as a second or third-line therapy for particular diseases;
- whether the product can be used effectively with other therapies to achieve higher response rates;
- adverse publicity about our product candidates or favorable publicity about competitive products;
- convenience and ease of administration of our products; and
- potential product liability claims.

If any of our product candidates are approved, but do not achieve an adequate level of acceptance by physicians, patients and the medical community, we may not generate sufficient revenue from these products, and we may not become or remain profitable. In addition, efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may never be successful.

The United Kingdom's withdrawal from the European Union, or Brexit, could result in increased regulatory and legal complexity, and impose additional challenges in securing regulatory approval of our product candidates in the European Union and the rest of Europe.

The United Kingdom withdrew from the European Union effective as of January 31, 2020, and is now in a period of transition until the end of 2020. The transition period maintains all existing trading arrangements. During the transition period, the United Kingdom and the European Union will negotiate future trading arrangements. Until a final agreement has been reached, an exit without a trade agreement in place, which would result in the United Kingdom losing access to free trade agreements for goods and services with the European Union and other countries, continues to be a risk. An exit by the United Kingdom from the European Union without an agreement in place would likely lead to legal uncertainty and potentially divergent laws and regulations between the United Kingdom and the European Union. We cannot predict whether or not the United Kingdom will significantly alter its current laws and regulations in respect of the pharmaceutical industry and, if so, what impact any such alteration would have on us or our business. Moreover, we cannot predict the impact that Brexit will have on (i) the marketing of pharmaceutical products, (ii) the process to obtain regulatory approval in the United Kingdom for product candidates or (iii) the award of exclusivities that are normally part of the European Union legal framework.

Brexit may also result in a reduction of funding to the EMA if the United Kingdom no longer makes financial contributions to European institutions, such as the EMA. If the United Kingdom funding is so reduced, it could create delays in the EMA issuing regulatory approvals for our products and product candidates and, accordingly, have a material adverse effect on our business, financial position, results of operations and future growth prospects.

As a result of Brexit, other European countries may seek to conduct referenda with respect to their continuing membership with the European Union. Given these possibilities and others we may not anticipate, as well as the absence of comparable precedent, it is unclear what financial, regulatory and legal implications the withdrawal of the United Kingdom from the European Union would have and how such withdrawal would affect us, and the full extent to which our business could be adversely affected.

In addition, following the Brexit vote, the European Union decided to move the headquarters of the EMA from the United Kingdom to the Netherlands. The EMA is currently finishing its relocation process to the Netherlands. However, as a result of the move, the EMA has lost a significant percentage of

its employees and was not able to hire at least the same amount of employees that left the EMA upon the movement of its headquarters from the United Kingdom to the Netherlands. This raises the possibility that new drug approvals in the European Union could be delayed as a result of such employee shortage.

Our product candidates for which we may seek approval as biologic products may face competition sooner than anticipated.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the Affordable Care Act, signed into law on March 23, 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product.

To the extent any of our product candidates approved as a biological product under a BLA qualifies for a 12-year period of exclusivity, for which we make no assurances, there is a risk that such exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

If any approved products are subject to biosimilar competition sooner than we expect, we will face significant pricing pressure and our commercial opportunity will be limited.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, or approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for our product candidates to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the global COVID-19 pandemic, on March 10, 2020 the FDA announced its intention to postpone most foreign inspections of manufacturing facilities and products and subsequently, on March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Risks Related to the Manufacturing of Our Product Candidates

The manufacture of mRNA-based medicines is complex and manufacturers often encounter difficulties in production, especially in the field of biologics. If we or any of our third-party manufacturers encounter difficulties, our ability to provide product candidates for clinical trials or products, if approved, to patients or future customers could be delayed or halted.

The manufacture of mRNA-based medicines is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and analytics. We and our third-party manufacturers must comply with cGMP, regulations and guidelines for the manufacturing of our product candidates used in preclinical studies and clinical trials and, if approved, marketed products. Manufacturers of biotechnology products often encounter difficulties in production, particularly in scaling up and validating initial production. Furthermore, if microbial, viral or other contaminations are discovered in our product candidates or in the manufacturing facilities where our product candidates are made, such manufacturing facilities may be closed for an extended period of time to investigate and remedy the contamination. Shortages of raw materials may also extend the period of time required to develop our product candidates.

Manufacturing these products requires facilities specifically designed for and validated for this purpose and sophisticated quality assurance and quality control procedures are necessary. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. The use of biologically derived ingredients can also lead to allegations of harm, including infections or allergic reactions, or closure of product facilities due to possible contamination.

In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with good manufacturing practices, lot consistency and timely availability of raw materials. Even if we obtain marketing approval for any of our product candidates, there is no assurance that we or our manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other comparable foreign regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential commercial launch of the product or to meet potential future demand. If we or our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

We cannot assure you that any disruptions or other issues relating to the manufacture of any of our product candidates will not occur in the future. Any delay or interruption in the supply of clinical trial supplies could delay the completion of planned clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls or other interruptions in the supply of our product candidates or products. We may also have to take inventory write-offs and incur other charges and expenses for product candidates or products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could delay or impede the development and commercialization of any of our product candidates or products and could have an adverse effect on our business, prospects, financial condition and results of operations.

We and our third-party manufacturers and suppliers could be subject to liabilities, fines, penalties or other sanctions under federal, state, local and foreign environmental, health and safety laws and regulations if we or they fail to comply with such laws or regulations or otherwise incur costs that could have a material adverse effect on our business.

We manufacture and produce mRNA-based active ingredients for our product pipeline. We also currently rely on and expect to continue to rely on third parties for the manufacturing and supply of active

pharmaceutical ingredients, or API, and drug products of our product candidates. We and these third parties are subject to various federal, state, local and foreign environmental, health and safety laws and regulations, including those governing laboratory procedures and the generation, handling, labeling, transportation, use, manufacture, storage, treatment and disposal of hazardous materials and wastes and worker health and safety. We do not have control over a manufacturer's or supplier's compliance with environmental, health and safety laws and regulations. Liabilities they incur pursuant to these laws and regulations could result in significant costs or in certain circumstances, an interruption in operations, any of which could adversely affect our business and financial condition.

With respect to any hazardous materials or waste which we are currently, or in the future will be, generating, handling, transporting, using, manufacturing, storing, treating or disposing of, we cannot eliminate the risk of contamination or injury from these materials or waste, including at third-party disposal sites. In the event of such contamination or injury, we could be held liable for any resulting damages and liability. We also could be subject to significant civil or criminal fines and penalties, cessation of operations, investigation or remedial costs or other sanctions for failure to comply with applicable environmental, health and safety laws. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts or otherwise have a material adverse effect on our business.

Undetected errors or defects in our production could harm our reputation or expose us to product liability claims.

Defects in the cGMP materials we produce may damage the third parties' businesses we work with and could harm their and our reputation. If that occurs, we may incur significant costs, the attention of our key personnel could be diverted, or other significant problems may arise. We may also be subject to warranty and liability claims for damages related to errors or defects in products made with our cGMP materials. In addition, if we do not meet industry or quality standards, if applicable, such products may be subject to recall. A material liability claim, recall or other occurrence that harms our reputation or decreases market acceptance of such products could harm our business and operating results.

Risks Related to Our Reliance on Collaborators and Other Third Parties

We rely on third parties to conduct our nonclinical and clinical trials and perform other tasks for us. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or comply with regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third-party CROs to monitor and manage data for our ongoing nonclinical and clinical programs. We rely on these parties for execution of our nonclinical and clinical studies and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. We and our CROs and other vendors are required to comply with cGMP, GCP, Good Laboratory Practice, or GLP, and other regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Union and comparable foreign regulatory authorities for all of our product candidates in nonclinical and clinical development. Regulatory authorities enforce these regulations through periodic inspections of study sponsors, principal investigators, trial sites and other contractors. If we or any of our CROs or vendors fail to comply with applicable regulations, the data generated in our nonclinical and clinical trials may be deemed unreliable and the EMA, FDA, or other regulatory authorities may require us to perform additional nonclinical and clinical trials before approving our marketing applications. In addition, even if, for example, the EMA finds our data generated in our nonclinical and clinical trials reliable for approving a marketing application, there is no assurance that other regulatory authorities like the FDA will find such data reliable and sufficient for approving a similar market application. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that all of our clinical trials comply with cGCP regulations. In addition,

our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If any of our relationships with these third-party CROs terminates, we may not be able to enter into arrangements with alternative CROs or do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our on-going nonclinical and clinical programs. If CROs do not successfully carry out their contractual duties or obligations, meet expected deadlines, conduct our studies in accordance with regulatory requirements or our stated study plans and protocols, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements, or for other reasons, our clinical trials may be extended, delayed, or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. CROs may also generate higher costs than anticipated. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition, and prospects.

If we or any third-party manufacturer of our product candidates is unable to increase the scale of production of our product candidates, and/or increase the product yield of manufacturing, then our costs to manufacture the product may increase and commercialization may be delayed.

In order to produce sufficient quantities to meet the demand for clinical trials and, if approved, subsequent commercialization of our product candidates in our pipeline or that we may develop, our third-party manufacturers will be required to increase their production and optimize their manufacturing processes while maintaining the quality of the product. The transition to larger scale and more robust production could prove difficult or costly. Further, any claims in our manufacturing process as a result of scaling up or optimization of the manufacturing, supply and fill and finish process may result in the need to obtain regulatory approvals. If we or our third-party manufacturers are not able to optimize manufacturing process to increase the product yield for our product candidates or cGMP production requirement for clinical studies, or are unable to produce increased amounts of our product candidates while maintaining the quality of the product or generally unable to produce the right quality, then we may not be able to meet the demands of clinical trials or market demands, which could decrease our ability to generate profits. Difficulty in achieving commercial scale-up production or production optimization or the need for additional regulatory approvals as a result could have a material adverse impact on our business and results of operations.

Risks Related to Our Intellectual Property Rights

If we are unable to obtain, maintain and enforce intellectual property protection for our products or product candidates, or if the scope of our intellectual property protection is not sufficiently broad, our ability to commercialize our product candidates successfully and to compete effectively may be materially adversely affected.

Our success depends on our ability to obtain and maintain patent and other intellectual property protection in the United States and other countries with respect to our current and future proprietary product candidates. We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our technology, manufacturing processes, products and product candidates. We and our collaborators have primarily sought to protect our proprietary positions by filing patent applications in the United States and abroad related to our proprietary technology,

manufacturing processes, and product candidates that are important to our business. Despite our efforts to protect our proprietary rights, unauthorized parties may be able to obtain and use information that we regard as proprietary.

The patent prosecution process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. It is also possible that we may fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. In addition, we or our collaborators, may only pursue, obtain or maintain patent protection in a limited number of countries. There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found. We may be unaware of prior art that could be used to invalidate or narrow the scope of an issued patent or prevent our pending patent applications from issuing as patents. Because patent applications in the United States, Europe and many other non-U.S. jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in scientific literature lag behind actual discoveries, we cannot be certain that we or our licensors were the first to make the inventions claimed in any of our owned or any in-licensed issued patents or pending patent applications, or that we or our licensors were the first to file for protection of the inventions set forth in our patents or patent applications. As a result, we may not be able to obtain or maintain protection for certain inventions. Even if patents do successfully issue, our owned or in-licensed patents may not adequately protect our intellectual property, provide exclusivity for our products or product candidates, prevent others from designing around our claims or otherwise provide us with a competitive advantage. We cannot offer any assurances about which, if any, patents will issue, the breadth of any such patents or whether any issued patents will be found invalid or unenforceable or will be threatened by third parties. In addition, third parties may challenge the validity, enforceability, ownership, inventorship or scope of any of our patents. Any successful challenge to any of our patents could deprive us of rights necessary for the successful commercialization of any product candidate that we may develop and could impair or eliminate our ability to collect future revenues and royalties with respect to such products or product candidates. If any of our patent applications with respect to our product candidates fail to issue as patents, if their breadth or strength of protection is narrowed or threatened, or if they fail to provide meaningful exclusivity or competitive position, it could dissuade companies from collaborating with us or otherwise adversely affect our competitive position.

The patent position of pharmaceutical companies is generally uncertain because it involves complex legal, scientific and factual considerations for which legal principles remain unsolved. The standards applied by the United States Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably, and can change. Additionally, the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property rights, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement, misappropriation, or other violation of our patents or other intellectual property, including the unauthorized reproduction of our manufacturing or other know-how or the marketing of competing products in violation of our intellectual property rights generally. Any of these outcomes could impair our ability to prevent competition from third parties, which may have a material adverse effect on our business, financial condition, results of operations, and prospects.

Further, the existence of issued patents does not guarantee our right to practice the patented technology or commercialize the patented product candidate. Third parties may have or obtain rights to patents which they may use to prevent or attempt to prevent us from practicing our patented technology or commercializing any of our patented product candidates. If any of these other parties are successful in obtaining valid and enforceable patents, and establishing our infringement of those patents, we could be prevented from selling our products unless we were able to obtain a license under such third-party patents, which may not be available on commercially reasonable terms or at all. In addition, third parties may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or agency of competent jurisdiction may find

our patents invalid or unenforceable. Our competitors and other third parties may also be able to circumvent our patents by developing similar or alternative product candidates in a non-infringing manner. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

In addition, competitors may use our technologies in jurisdictions where we have not obtained or are unable to adequately enforce patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States and Europe. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing with us. Proceedings to enforce our patent rights, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or held unenforceable, or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop, acquire or license.

Our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, the research resulting in certain of our patents and technology, including patents and technology relating to our yellow fever product candidate, was funded in part by the U.S. government. As a result, the U.S. government has certain rights to such patent rights and technology, which include march-in rights. When new technologies are developed with government funding, in order to secure ownership of such patent rights, the recipient of such funding is required to comply with certain government regulations, including timely disclosing the inventions claimed in such patent rights to the U.S. government and timely electing title to such inventions. Additionally, the U.S. government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. Accordingly, we have granted the U.S. government a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States, the inventions described in the patents and patent applications relating to our technology or one or more of our product candidates. If the U.S. government decides to exercise these rights, it is not required to engage us as its contractor in connection with doing so. The government's rights may also permit it to disclose our confidential information to third parties and to exercise march-in rights to use or allow third parties to use such government-funded technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, or because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. If we fail to comply with those requirements, we could lose our ownership of or other rights to any patents subject to such regulations. Any exercise by the government of any of the foregoing rights or by any third party of its reserved rights could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

In Germany, the German federal government, and the Federal Ministry of Health and downstream authorities in the event of a national epidemic, have the right to order the use of our owned and in-licensed patents in the interest of the public welfare or the security of the Federal Republic. The German government may issue such an order with respect to our owned or in-licensed patents and we may lose exclusivity with respect to the technologies and product candidates covered by such patents. For example, if the German government determines that we are unable to develop our SARS-CoV-2 vaccine on a timeline or at a scale that is necessary to respond to the COVID-19 pandemic, it may issue a use order for the patents covering our development of the SARS-CoV-2 vaccine. We would be entitled to compensation in the event a use order is issued with respect to our owned or in-licensed patents; however, such compensation may be less than what we could otherwise receive and any such use order could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Additionally, the research resulting in certain of our patents and technology, including patents and technology relating to our CV8102 and RSV product candidates, was funded in part by the German

Ministry of Education and Research, or the BMBF. Results of such government funded research projects must, subject to certain conditions, be made available free of charge for academic research and teaching in Germany and must be published in half-yearly interim reports and a final report following completion of the funded work. Information relating to intellectual property generated, commercial expectations, scientific chances of success and next steps and certain additional information must be disclosed to the German government and must be disclosed to third parties for academic research and teaching upon request under a written confidentiality agreement. The BMBF additionally has, in the case of a special public interest, a non-exclusive and transferable right to use intellectual property generated as part of the funded work. Contracts with third parties relating to the exploitation of the results of the funded work must be disclosed to the BMBF and any such contracts with parties outside of the European Union require the prior consent of the BMBF to the extent they deviate from an exploitation plan previously approved by the BMBF. Additionally, if we fail to use or commercialize the results of the funded work we may be required to grant third parties licenses to use such results. In certain scenarios, including if we come under the decisive influence of foreign investors, the funded results are exclusively or predominantly used outside of Germany without the prior consent of the BMBF or if we are in breach of our obligations under the grant, the grant funding, including funding already received, can be revoked.

Furthermore, certain of our patents and technology, including patents and technology relating to our rotavirus, malaria, Lassa virus and SARS-CoV-2 product candidates, were funded in part by grants from nonprofit third parties, including the Bill & Melinda Gates Foundation and CEPI. We are required to fulfill certain contractual obligations with respect to products created using such grant funding, including making certain products available at an affordable price in a list of clearly defined low and lower-middle income countries and ensuring that certain products are available in geographic regions where there has been an outbreak of an infectious disease at certain reduced economic rates. See “Business — Collaborations.”

Furthermore, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its effective filing date. Various extensions may be available, however, the life of a patent and the protection it affords is limited. Given the amount of time required for the development, testing, regulatory review and approval of new product candidates, our patents protecting such candidates might expire before or shortly after such candidates are commercialized. If we encounter delays in obtaining regulatory approvals, the period of time during which we could market a product under patent protection could be further reduced. Even if patents covering our product candidates are obtained, once such patents expire, we may be vulnerable to competition from similar or biosimilar products. The launch of a similar or biosimilar version of one of our products would likely result in an immediate and substantial reduction in the demand for our product, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we fail to comply with our obligations under any license, collaboration or other intellectual property agreements, disagree over contract interpretation, or otherwise experience disruptions to our business relationships with our collaborators or licensors, we could lose intellectual property rights that are necessary to our business.

We rely, in part, on license, collaboration and other intellectual property agreements. These may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our product candidates in the future.

In addition, our existing licenses and collaboration agreements, including our agreements with Genmab, Arcturus, Acuitas, Boehringer Ingelheim, GSK, the Bill & Melinda Gates Foundation, CRISPR Therapeutics and CEPI, impose, and any future licenses, collaborations or other intellectual property agreements we enter into are likely to impose, various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution and enforcement or other obligations on us. Our licenses and collaboration agreements, including our agreement with Genmab, impose, and any future agreement we enter into may also impose, restrictions on our ability to license certain of our intellectual property to third parties or to develop or commercialize certain product candidates or technologies. In spite of our best efforts, our licensors, licensees and collaborators may conclude that we have breached our obligations under our agreements, or that we have used the intellectual property licensed to us in an unauthorized manner, in which case, we may be required to pay damages and the licensor, licensee or

collaborator may have the right to terminate the agreement. Any of the foregoing could result in us being unable to develop, manufacture and sell products that are covered by the licensed technology, enable a competitor to gain access to the licensed technology or disrupt our right to milestone or royalty payments. We might not have the necessary rights or the financial resources to develop, manufacture or market our current or future product candidates without the rights granted under our licenses, and the loss of sales or potential sales in such product candidates could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Disputes may arise regarding intellectual property subject to licensing, collaboration or other intellectual property agreements, including:

- the scope of rights granted under the license agreement and other interpretation related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the license agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- our financial obligations under the license agreement;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, the agreements under which we currently license intellectual property or technology to or from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

In some circumstances, we may not have the right to control the preparation, filing, prosecution, maintenance, enforcement, and defense of patents and patent applications covering the technology that we license from third parties. We cannot be certain that these patents and applications will be prepared, filed, prosecuted, maintained, enforced, and defended in a manner consistent with the best interests of our business. If our licensors fail to prosecute, maintain, enforce, and defend such intellectual property, or lose rights to such intellectual property, the rights we have licensed and our exclusivity may be reduced or eliminated and our right to develop and commercialize any of our products that are subject to such licensed rights could be adversely affected.

Moreover, our rights to our in-licensed patents and patent applications may depend, in part, on inter-institutional or other operating agreements between the joint owners of such in-licensed patents and patent applications. If one or more of such joint owners breaches such inter-institutional or operating agreements, our rights to such in-licensed patents and patent applications may be adversely affected. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability. In addition, the development of certain of our product candidates is funded by grants that impose certain pricing limitations on such product candidates and limit our ability to commercialize such product candidates and to achieve or maintain profitability. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have on reasonable terms or at all, we may have to abandon development of the relevant program or product candidate and our business, financial condition, results of operations, and prospects could suffer.

We may become involved in lawsuits to protect or enforce our patents, which could be expensive, time-consuming and unsuccessful and could result in a court or administrative body finding our patents to be invalid or unenforceable.

Even if the patent applications we own or license are issued, third parties may infringe our patents. To counter infringement, we may be required to file infringement claims, which can be expensive and time-consuming. If we initiate legal proceedings against a third party to enforce a patent covering any of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including novelty, non-obviousness (or inventive step), written description or enablement. In addition, patent validity challenges may, under certain circumstances, be based upon non-statutory obviousness-type double patenting, which, if successful, could result in a finding that the claims are invalid for obviousness-type double patenting or the loss of patent term if a terminal disclaimer is filed to obviate a finding of obviousness-type double patenting. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld information material to patentability from the USPTO, or made a misleading statement, during prosecution. In an infringement proceeding, a court may decide that one or more of our patents is not valid, is unenforceable or is not infringed, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. Third parties also may raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post-grant review, *inter partes* review, interference proceedings, derivation proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in the revocation or cancellation of or amendment to our patents in such a way that they no longer cover our product candidates or provide any competitive advantage. For example, one of our manufacturing related U.S. patents was invalidated in an *inter partes* review proceeding and certain of our European patents relating to RNA-based adjuvants/immunostimulants and RNA-coded antibodies have been revoked in European opposition proceedings. Some of these decisions are currently on appeal and continuation or divisional applications of certain of the revoked patents have been filed and are currently under examination, although there can be no assurance that any such appeal will be successful or that any such patent applications will issue as patents that provide us with any competitive advantage. Additionally, several of our European patents relating to RNA-based adjuvants/immunostimulants, mRNA formulation, mRNA-based vaccination of specific patient populations, combination of mRNA-based vaccination and inhibition of the PD-1 pathway, combination of mRNA-based vaccination and agonistic OX40 antibodies, methods for RNA analysis and intratumoral (m)RNA treatment are currently subject to opposition proceedings. The outcome following legal assertions of invalidity and unenforceability is unpredictable. If a third party were to prevail on a legal assertion of invalidity or unenforceability, we could lose part or all of the patent protection on one or more of our product candidates, which could result in our competitors and other third parties using our technology to compete with us. Such a loss of patent protection could have a material adverse impact on our business.

Interference proceedings, or other similar enforcement and revocation proceedings, provoked by third parties or brought by us may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, infringement, misappropriation or other violation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against competitors, affect our ability to receive royalties or other licensing consideration from our licensees, and may curtail or preclude our ability to exclude third parties from making, using and selling similar or competitive products. Any of these occurrences could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we are sued for infringing, misappropriating, or otherwise violating intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.

Our commercial success depends, in part, on our ability to develop, manufacture, market and sell our product candidates without infringing, misappropriating, or otherwise violating the intellectual property and other proprietary rights of third parties.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights of third parties with respect to our product candidates, including interference and post-grant proceedings before the USPTO. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the composition, formulation, use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications that we may or may not be aware of which may later result in issued patents that our product candidates may be accused of infringing. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our product candidates. After issuance, the scope of patent claims remains subject to construction based on interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Accordingly, third parties may assert infringement claims against us based on intellectual property rights that exist now or arise in the future. The outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance. The pharmaceutical and biotechnology industries have produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use or manufacture. The scope of protection afforded by a patent is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims at issue are invalid or unenforceable, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could significantly harm our business and operating results. In addition, we may not have sufficient resources to bring these actions to a successful conclusion. Some claimants may have substantially greater resources than we do and may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us, especially as we gain greater visibility and market exposure as a public company.

Third parties have, and may in the future have, U.S. and non-U.S. issued patents and pending patent applications relating to compounds, methods of manufacturing compounds or methods of use for the treatment of the disease indications for which we are developing our product candidates that may cover our product candidates. For example, we are aware of certain third-party U.S. and non-U.S. issued patents and patent applications, including those of our competitors, that relate to RNA-encoded antigens in LNPs and LNP-formulated RNA that may be construed to cover the LNP-formulated RNA technology used in our vaccines and protein and antibody therapies. We are also aware of certain third-party U.S. and non-U.S. patent applications, including those of our competitors, that relate to coronavirus vaccines and treatments

and we expect such third parties to have filed additional patent applications, which have not yet been published and to file additional patent applications in the future.

In the event that any of these patent rights were asserted against us, we believe that we have defenses against any such action, including that such patents would not be infringed by our product candidates and/or that such patents are not valid. However, if any such patent rights were to be asserted against us and our defenses to such assertion were unsuccessful, unless we obtain a license to such patents, we could be liable for damages, which could be significant and include treble damages and attorneys' fees if we are found to willfully infringe such patents, and we could be precluded from commercializing any product candidates that were ultimately held to infringe such patents, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are required to obtain a license from any third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate, we may not be able to obtain such required license on commercially reasonable terms or at all. In particular, any of our competitors that control intellectual property that we are found to infringe may be unwilling to provide us a license under any terms. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us; alternatively or additionally it could include terms that impede or destroy our ability to compete successfully in the commercial marketplace. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. Further, if a patent infringement suit is brought against us or our third-party service providers and if we are unable to successfully obtain rights to required third-party intellectual property, we may be required to expend significant time and resources to redesign our product candidates, or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis, and may delay or require us to abandon our development, manufacturing or sales activities relating to our product candidates. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Intellectual property litigation and other proceedings could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Even if resolved in our favor, intellectual property litigation or other legal proceedings relating to our, our licensor's or other third parties' intellectual property claims may cause us to incur significant expenses and could distract our personnel from their normal responsibilities. Patent litigation and other proceedings may also absorb significant management time. If not resolved in our favor, litigation may require us to pay any portion of our opponents' legal fees. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Our competitors or other third parties may be able to sustain the cost of such litigation and proceedings more effectively than we can because of their substantially greater resources. Uncertainties resulting from our participation in patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Furthermore, because of the substantial amount of discovery required in certain jurisdictions in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, the perceived value of our product candidates or intellectual property could be diminished. Accordingly, the market price of our common shares may decline. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our business, financial condition, results of operations and prospects.

Changes to the patent law in the United States and other jurisdictions could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, thereby impairing our ability to protect our technologies and product candidates.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical

industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For example, the Leahy-Smith America Invents Act, or the America Invents Act, was signed into law on September 16, 2011, and many of the substantive changes became effective on March 16, 2013. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Specifically, the America Invents Act reforms United States patent law in part by changing the U.S. patent system from a “first to invent” system to a “first inventor to file” system. Under a “first inventor to file” system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor was the first to invent the invention. This will require us to be cognizant going forward of the time from invention to filing of a patent application and be diligent in filing patent applications. Circumstances may arise that could prevent us from promptly filing patent applications on our inventions and allow third parties to file patents claiming our inventions before we are able to do so. The America Invents Act also includes a number of significant changes that affect the way patent applications will be prosecuted and may also affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by the USPTO administered post grant proceedings, including reexamination proceedings, *inter partes* review, post grant review and derivation proceedings. These adversarial proceedings at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower burden of proof than used in litigation in U.S. federal courts. Therefore, it is generally considered easier for a competitor or third party to have a U.S. patent invalidated in a USPTO post-grant review or *inter partes* review proceeding than in a litigation in a U.S. federal court. One of our manufacturing related patents has been invalidated in an *inter partes* proceeding and if any of our other patents are challenged by a third party in a USPTO proceeding, there is no guarantee that we or our licensors or collaborators will be successful in defending the patent, which would result in a loss or narrowing of the challenged patent right to us.

In addition, the patent positions of companies in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways. In addition, the complexity and uncertainty of European patent laws have also increased in recent years. Complying with these laws and regulations could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

We may be subject to claims by third parties asserting that our employees, consultants, independent contractors or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property and proprietary technology.

Many of our current and former employees, consultants, and independent contractors including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including some which may be competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees, consultants or independent contractors have used or disclosed intellectual property, including trade secrets or other proprietary information, of such individual’s current or former employers, or that patents and applications we have filed to protect inventions of these individuals, even those related to one or more of our product candidates, are rightfully owned by their former or concurrent employer. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on an exclusive

basis or on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while we typically require our employees, consultants and independent contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own, or such agreements may be breached or alleged to be ineffective, and the assignment may not be self-executing, which may result in claims by or against us related to the ownership of such intellectual property or may result in such intellectual property becoming assigned to third parties. If we fail in enforcing or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our senior management and scientific personnel. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Obtaining and maintaining our patent protection, including patents licensed from third parties, depends on compliance with various procedural, documentary, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for noncompliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and patent applications will be due to be paid to the USPTO and various government patent agencies outside the United States over the lifetime of our patents and patent applications and any patent rights we may own or license in the future. Additionally, the USPTO and various government patent agencies outside the United States require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In certain cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the particular jurisdiction. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If we or our licensors fail to maintain the patents and patent applications covering or otherwise protecting our product candidates, it could have a material adverse effect on our business. In addition, to the extent that we have responsibility for taking any action related to the prosecution or maintenance of patents or patent applications in-licensed from a third party, any failure on our part to maintain the in-licensed intellectual property could jeopardize our rights under the relevant license and may have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we do not obtain patent term extensions and data exclusivity for each of our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any product candidates we may develop, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Action of 1984, or Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. In the European Union, a maximum of five and a half years of supplementary protection can be achieved for an active ingredient or combinations of active ingredients of a medicinal product protected by a basic patent, if a valid marketing authorization exists (which must be the first authorization to place the product on the market as a medicinal product) and if the product has not already been the subject of supplementary protection. However, we may not receive an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or if the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations, and prospects could be materially harmed.

Certain of our employees and patents are subject to German law

A significant number of our personnel, work in Germany and are subject to German employment law. Inventions which may be the subject of a patent or of protection as a utility model as well as technical improvement proposals for other technical innovations that may not be the subject of a patent or of protection as a utility model made by such employees are subject to the provisions of the German Act on Employees' Inventions (*Gesetz über Arbeitnehmererfindungen*), which regulates the ownership of, and compensation for, inventions made by employees. We face the risk that disputes may occur between us and our current or former employees pertaining to the sufficiency of compensation paid by us, allocation of rights to inventions under this act, or alleged non-adherence to the provisions of this act, any of which may be costly to resolve and take up our management's time and efforts whether we prevail or fail in such dispute. In addition, under the German Act on Employees' Inventions, certain employees retain rights to patents they invented or co-invented and disclosed to us prior to October 1, 2009 if the employee inventions were not actively claimed by us after notification by the employee inventors. While we believe that all of our current and past German employee inventors have assigned to us their interest in inventions and patents they invented or co-invented, there can be no assurance that all such assignments are fully effective. Therefore, there can be no assurance that present or former employees do not hold rights to intellectual property used by us or that such employees will not demand the registration of intellectual property rights in their name or demand damages pursuant to the German Act on Employees' Inventions or other applicable laws. Even if we lawfully own all inventions of our employee inventors who are subject to the German Act on Employees' Inventions, we are required under German law to reasonably compensate such employees for the use of the inventions. If we are required to pay increased compensation or face other disputes under the German Act on Employees' Inventions, our business, financial condition, results of operations, and prospects could be adversely affected.

The German Act on Employees' Inventions does not generally apply to managing directors, supervisory directors, freelancers or agents who are not employees under German labor law. Unless the German Act on Employees' Inventions has been referred to in the respective services agreements, inventions and intellectual property rights created by such inventors must be assigned to us by contract. While we believe that all of our managing directors, supervisory directors, freelancers or agents which are not employees have assigned to us their interest in inventions and patents required for our course of business, there can be no assurance that all such assignments are fully effective. If any of our current or past employees, managing directors, supervisory directors, freelancers or agents obtain or retain ownership of any inventions or related intellectual property rights that we believe we own, we may lose valuable intellectual property rights and be required to obtain and maintain licenses from such persons to such inventions or intellectual property rights, which may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain and maintain a license to any such person's interest in such inventions or intellectual property rights, we may need to cease the development, manufacture, and commercialization of one or more of our product candidates or the product candidates we may develop. In addition, any loss of exclusivity of our intellectual property rights could limit our ability to stop others from using or commercializing similar or identical technologies and products. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we are unable to protect the confidentiality of our proprietary information, the value of our technology and products could be materially adversely affected.

In addition to patent protection, we also rely on trade secrets and confidentiality agreements to protect other proprietary information that is not patentable or that we elect not to patent. To maintain the confidentiality of trade secrets and proprietary information, we enter into confidentiality agreements with our employees, consultants, independent contractors, collaborators, CMOs, CROs and others upon the commencement of their relationships with us. These agreements require that all confidential information developed by the individual or entity or made known to the individual or entity by us during the course of the individual's or entity's relationship with us be kept confidential and not disclosed to third parties. Our agreements with employees as well as our personnel policies also generally provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property (to the extent not covered by the German Act on Employees' Inventions) or that we may obtain full rights to such inventions at our election. However, we cannot guarantee that we have entered into such agreements with each

party that may have or has had access to our trade secrets or proprietary technology and processes and cannot guarantee that individuals with whom we have these agreements will comply with their terms. We also face the risk that present or former employees could continue to hold rights to intellectual property used by us, may demand the registration of intellectual property rights in their name, and demand damages pursuant to the Patent Act. In addition, present or former employees may demand damages due to violation of obligations under the German Act on Employees' Invention. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets.

We may not have adequate remedies in the event of unauthorized use or disclosure of our proprietary information in the case of a breach of any such agreements and our trade secrets and other proprietary information could be disclosed to third parties, including our competitors. Many of our partners also collaborate with our competitors and other third parties. The disclosure of our trade secrets to our competitors, or more broadly, would impair our competitive position and may materially harm our business, financial condition, results of operations, and prospects. Costly and time consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to maintain trade secret protection could adversely affect our competitive business position. The enforceability of confidentiality agreements may vary from jurisdiction to jurisdiction. Courts outside the United States are sometimes less willing to protect proprietary information, technology and know-how. In addition, others may independently discover or develop substantially equivalent or superior proprietary information and techniques, and the existence of our own trade secrets affords no protection against such independent discovery.

We may not be successful in obtaining necessary intellectual property rights to product candidates for our development pipeline through acquisitions and in-licenses.

Although we intend to develop product candidates through our own internal research, we may need to obtain additional licenses from others to advance our research or allow commercialization of our product candidates and it is possible that we may be unable to obtain additional licenses at a reasonable cost or on reasonable terms, if at all. However, we may be unable to acquire or in-license intellectual property rights relating to, or necessary for, any product candidates from third parties on an exclusive basis or commercially reasonable terms or at all. In that event, we may be unable to develop or commercialize such product candidates. We may also be unable to identify product candidates that we believe are an appropriate strategic fit for our company and intellectual property relating to, or necessary for, such product candidates.

The in-licensing and acquisition of third-party intellectual property is a competitive area, and a number of more established companies are also pursuing strategies to in-license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. Furthermore, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. In addition, we expect that competition for the in-licensing or acquisition of third-party intellectual property rights for product candidates that are attractive to us may increase in the future, which may mean fewer suitable opportunities for us as well as higher acquisition or licensing costs. We may be unable to in-license or acquire the third-party intellectual property rights for product candidates on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain rights to suitable product candidates, our business, financial condition, results of operations, and prospects for growth could suffer.

We may not be able to protect our intellectual property and proprietary rights throughout the world.

Filing, prosecuting, and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Third parties may use our technologies in jurisdictions where we have not obtained or are unable to adequately enforce patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may

compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. Proceedings to enforce our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property and proprietary rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected.

If our trademarks and trade names are not adequately protected, we may not be able to build name recognition in our markets of interest and our business, financial condition, results of operations, and prospects may be adversely affected.

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names or marks which we need for name recognition by potential partners or customers in our markets of interest. During trademark registration proceedings, we may receive rejections. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business, financial condition, results of operations, and prospects may be adversely affected.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our proprietary and intellectual property rights is uncertain because such rights offer only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to develop products that are similar to, or better than, our product candidates in a way that is not covered by the claims of the patents we license or may own currently or in the future;
- we, or our licensing partners or current or future collaborators, might not have been the first to make the inventions covered by issued patents or pending patent applications that we license or may own currently or in the future;
- we, or our licensing partners or current or future collaborators, might not have been the first to file patent applications for certain of our or their inventions;
- our pending owned or in-licensed patent applications may not lead to issued patents;

- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property;
- our competitors or other third parties might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- it is possible that there are prior public disclosures that could invalidate our or our licensors' patents;
- the patents of third parties or pending or future applications of third parties, if issued, may have an adverse effect on our business;
- any patents that we obtain may not provide us with any competitive advantages or may ultimately be found not to be owned by us, invalid or unenforceable; or
- we may not develop additional proprietary technologies that are patentable.

Should any of these events occur, they could significantly harm our business, financial conditions, results of operations, and prospects.

Risks Related to Our Business and Industry

Our current and future relationships with third-party payors, health care professionals and customers in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, physician payment transparency and other healthcare laws and regulations, which could expose us to significant penalties.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with health care professionals, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the federal civil False Claims Act, that may constrain the business or financial arrangements and relationships through which we conduct clinical research, sell, market and distribute any products for which we obtain marketing approval. In addition, we may be subject to physician payment transparency laws and patient privacy regulation by the federal government and by the U.S. states and foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs, such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation. Further, several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the Anti-Kickback Statute has been violated;
- federal civil and criminal false claims laws, including, without limitation, the federal civil False Claims Act (that can be enforced through civil whistleblower or qui tam actions), and the civil monetary penalties law, which impose criminal and civil penalties against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. Moreover, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;
- the U.S. Federal Food, Drug, and Cosmetic Act, which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices;
- the U.S. Public Health Service Act, or PHS Act, which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product;
- the Physician Payments Sunshine Act, created under Section 6002 of the Affordable Care Act, and its implementing regulations, which requires specified manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments or other “transfers of value” made to physicians, which is defined to include doctors, dentists, optometrists, podiatrists and chiropractors, certain other health care providers beginning in 2022, and teaching hospitals and applicable manufacturers to report annually to CMS ownership and investment interests held by physicians and their immediate family members by the 90th day of each calendar year. All such reported information is publicly available; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; and state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices, including our relationships with physicians and other healthcare providers, some of whom may recommend, purchase or prescribe our product candidate, if approved, may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations.

If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, disgorgement, individual imprisonment, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of noncompliance with these laws and the curtailment or restructuring of our operations, which could have a material adverse effect on our business. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from participation in government healthcare programs, which could also materially affect our business.

Even if we, or any future collaborators, are able to commercialize any product candidate that we, or they, develop, the successful commercialization of our product candidates will depend in part on the extent to which governmental authorities, private health insurers and other third-party payors provide coverage and adequate reimbursement levels and implement pricing policies favorable for our product candidates. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

The healthcare industry is acutely focused on cost containment, both in the United States and elsewhere. Government authorities and third-party payors have attempted to control costs by limiting

coverage and the amount of reimbursement. The insurance coverage and reimbursement status of newly approved products for orphan diseases is particularly uncertain and failure to obtain or maintain adequate coverage and reimbursement for our product candidates could limit our ability to generate revenue. Third-party payors may not view our product candidates, if approved, as cost-effective, and coverage and reimbursement may not be available to our customers or may not be sufficient to allow our products, if any, to be marketed on a competitive basis. If coverage and reimbursement are not available, or reimbursement is available only to limited levels, we, or any future collaborators, may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us, or any future collaborators, to establish or maintain pricing sufficient to realize a sufficient return on our or their investments. Cost-control initiatives could also cause us to decrease any price we might establish for our product candidates, which could result in lower than anticipated product revenues. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including our costs related to research, development, manufacture, sale and distribution. Reimbursement rates may vary, by way of example, according to the use of the product and the clinical setting in which it is used. For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. If the prices for our product candidates, if approved, decrease or if governmental and other third-party payors do not provide adequate coverage or reimbursement, our business, prospects, operating results and financial condition will suffer, perhaps materially.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products, including genetic treatments. In the United States, the Centers for Medicare & Medicaid Services, or CMS, the federal agency responsible for administering the Medicare program, make the principal decisions about coverage and reimbursement for new treatments under Medicare. Private payors tend to follow CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement for novel products such as ours. In addition, certain Affordable Care Act marketplace and other private payor plans are required to include coverage for certain preventative services, including vaccinations recommended by the U.S. Centers for Disease Control's, or CDC's, Advisory Committee on Immunization Practices, or ACIP, without cost share obligations (i.e., co-payments, deductibles or co-insurance) for plan members. For Medicare beneficiaries, vaccines may be covered for reimbursement under either the Part B program or Part D depending on several criteria, including the type of vaccine and the beneficiary's coverage eligibility. If our vaccine candidates, once approved, are reimbursed only under the Part D program, physicians may be less willing to use our products because of the claims adjudication costs and time related to the claims adjudication process and collection of co-payment associated with the Part D program.

Outside the United States, certain countries, including a number of member states of the European Union, set prices and reimbursement for pharmaceutical products, with limited participation from the marketing authorization holders. We cannot be sure that such prices and reimbursement will be acceptable to us or our collaborators. If the regulatory authorities in these jurisdictions set prices or reimbursement levels that are not commercially attractive for us or our collaborators, our revenues from sales by us or our collaborators, and the potential profitability of our product candidates, in those countries would be negatively affected. Additionally, some countries require approval of the sale price of a product before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then may experience delays in the reimbursement approval of our product or be subject to price regulations that would delay our commercial launch of the product, possibly for lengthy time periods, which could negatively impact the revenues we are able to generate from the sale of the product in that particular country.

Moreover, an increasing number of countries are taking initiatives to attempt to reduce large budget deficits by focusing cost-cutting efforts on pharmaceuticals for their state-run health care systems. These international price control efforts have impacted all regions of the world, but have been most drastic in the European Union. In some countries, in particular in many member states of the European Union, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing

approval. In addition, publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries.

If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business, financial condition, results of operations or prospects could be materially adversely affected. Cost-control initiatives could cause us, or any future collaborators, to decrease the price we, or they, might establish for products, which could result in lower than anticipated product revenues. An inability to promptly obtain coverage and adequate payment rates from both government-funded and private payors for any of our product candidates for which we, or any future collaborator, obtain marketing approval could significantly harm our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Price controls may be imposed in certain markets, which may adversely affect our future profitability.

In some countries, particularly member states of the European Union, the pricing of prescription drugs is subject to governmental control or control by associations of health insurers. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various countries and parallel distribution, or arbitrage between low-priced and high-priced countries, can further reduce prices. In some countries, in particular in many member states of the European Union, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business, financial condition, results of operations or prospects could be materially adversely affected.

Exchange rate fluctuations or abandonment of the euro currency may materially affect our results of operations and financial condition.

Potential future expense and revenue may be incurred or derived from outside the European Union, particularly the United States. As a result, our business and share price may be affected by fluctuations in foreign exchange rates between the euro and other currencies, particularly the U.S. dollar, which may also have a significant impact on our reported results of operations and cash flows from period to period. In addition, the abandonment of the euro by one or more members of the European Union could lead to the re-introduction of individual currencies in one or more European Union member states, or in more extreme circumstances, the dissolution of the European Union. The effects on our business of the abandonment of the euro as a currency, the exit of one or more European Union member states from the European Union (such as Brexit) or a potential dissolution of the European Union, are impossible to predict with certainty, and any such events could have a material adverse effect on our business, financial condition and results of operations.

We could be subject to strict restrictions on the movement of cash and the exchange of foreign currencies.

In some countries, we could be subject to strict restrictions on the movement of cash and the exchange of foreign currencies, which would limit our ability to use this cash across our global operations. This risk could increase as we continue our geographic expansion, and in particular if we seek to expand into emerging markets, which are more likely to impose these restrictions than more established markets.

Current and future legislation may increase the difficulty and cost for us and any collaborators to obtain marketing approval of and commercialize our product candidates and affect the prices we, or they, may obtain.

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing

approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval. We expect that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and in additional downward pressure on the price that we, or any collaborators, may receive for any approved products.

In March 2010, President Obama signed the Affordable Care Act into law. Among the provisions of the Affordable Care Act of potential importance to our business and our product candidates are the following:

- an annual, non-deductible fee on any entity that manufactures or imports specified branded prescription products and biologic products;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for products that are inhaled, infused, instilled, implanted or injected;
- extension of manufacturers' Medicaid rebate liability to individuals enrolled in Medicaid managed care organizations;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- a requirement that certain Affordable Care Act marketplace and other private payor plans include coverage for preventative services, including vaccinations recommended by the ACIP without cost share obligations (i.e., co-payments, deductibles or co-insurance) for plan members;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- a new Independent Payment Advisory Board, or IPAB, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription products; and
- established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models.

Since its enactment, there have been judicial and congressional challenges to numerous aspects of the Affordable Care Act. By way of example, the 2017 Tax Reform Act included a provision repealing the individual mandate, effective January 1, 2019. On December 14, 2018, a U.S. District Court judge in the Northern District of Texas ruled that the individual mandate portion of the Affordable Care Act is an essential and inseparable feature of the Affordable Care Act, and therefore because the mandate was repealed, the remaining provisions of the Affordable Care Act are invalid as well. On December 18, 2019, the U.S. Court of Appeals for the Fifth Circuit upheld the District Court ruling that the individual mandate was unconstitutional, but remanded the case back to the District Court to determine whether the remaining provisions of the Affordable Care Act are invalid as well. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review the case, although it is unclear when a decision will be made or how the Supreme Court will rule. In addition, there may be other efforts to challenge, repeal or replace the Affordable Care Act. We are continuing to monitor any changes to the Affordable Care Act that, in turn, may potentially impact our business in the future.

Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. These changes include aggregate reductions to Medicare payments to providers of 2% per fiscal year pursuant to the Budget Control Act of 2011 and subsequent laws, which began in 2013 and will remain in effect through 2029, unless additional congressional action is taken. These reductions were suspended from May 1, 2020 through December 31, 2020 under the Coronavirus Aid, Relief and Economic Security Act, or CARES Act, which was signed into law in March 2020. The CARES Act also extended the sequester by one year, through 2030. In addition, in January 2013, the American Taxpayer Relief Act of 2012 was

signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. New laws may result in additional reductions in Medicare and other healthcare funding, which may materially adversely affect customer demand and affordability for our product candidates, if approved, and, accordingly, the results of our financial operations.

Also, there has been heightened governmental scrutiny recently over the manner in which pharmaceutical companies set prices for their marketed products, which have resulted in several congressional inquiries and proposed federal legislation, as well as state efforts, designed to, among other things, bring more transparency to product pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. At the federal level, the Trump administration's budget proposal for fiscal year 2021 includes a \$135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs. On March 10, 2020, the Trump administration sent "principles" for drug pricing to Congress, calling for legislation that would, among other things, cap Medicare Part D beneficiary out-of-pocket pharmacy expenses, provide an option to cap Medicare Part D beneficiary monthly out-of-pocket expenses, and place limits on pharmaceutical price increases. Further, the Trump administration previously released a "blueprint" to lower prescription drug prices and out-of-pocket costs that contained proposals to increase drug manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products, and reduce the out-of-pocket costs of drug products paid by consumers. The Department of Health and Human Services, or HHS, has solicited feedback on some of these measures and has implemented others under its existing authority. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage plans the option to use step therapy for Part B drugs beginning January 1, 2020. This final rule codified CMS's policy change that was effective January 1, 2019. While some of these and other measures may require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, individual states in the United States have become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures and, in some cases, designed to encourage importation from other countries and bulk purchasing. These measures could reduce the ultimate demand for our products, once approved, or put pressure on our product pricing.

The policies of the FDA or similar regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. For example, in December 2016, the 21st Century Cures Act, or Cures Act, was signed into law. The Cures Act, among other things, is intended to modernize the regulation of drugs and biologics and spur innovation, but it has not yet been implemented and its ultimate implementation is unclear. If we or our collaborators are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or our collaborators are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability, which would adversely affect our business.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of executive orders, that could impose significant burdens on, or otherwise materially delay, FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

We cannot predict whether future healthcare legislative or policy changes will be implemented at the federal or state level or in countries outside of the United States in which we may do business, or the

effect any future legislation or regulation will have on us, but we expect there will continue to be legislative and regulatory proposals at the federal and state levels directed at containing or lowering the cost of health care.

Cyber-attacks or other failures in our or our third-party vendors', contractors' or consultants' telecommunications or information technology systems could result in information theft, data corruption and significant disruption of our business operations.

We utilize information technology, or IT, systems and networks and cloud computing services to process, transmit and store electronic information in connection with our business activities. We manage and maintain our applications and data utilizing a combination of on-site systems, managed data centers and cloud-based data centers. We utilize external security and infrastructure vendors to manage our information technology systems and data centers. These applications and data encompass a wide variety of business-critical information, including research and development information, commercial information, and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate use or disclosure, inappropriate modification, and the risk of our being unable to adequately monitor, audit and modify our controls over our critical information. This risk extends to the third-party vendors and subcontractors we use to manage this sensitive data. Despite the implementation of security measures, given the size and complexity of our internal IT systems and those of our third-party vendors, contractors and consultants, and the increasing amounts of confidential information that they maintain, such IT systems are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war, and telecommunication and electrical failures. Such IT systems are additionally vulnerable to security breaches from inadvertent or intentional actions by our employees, third-party vendors, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information). These threats pose a risk to the security of our systems and networks, the confidentiality and the availability and integrity of our data and these risks apply both to us, and to third parties on whose systems we rely for the conduct of our business.

Cyber threats are persistent and constantly evolving. Such threats have increased in frequency, scope and potential impact in recent years, which increase the difficulty of detecting and successfully defending against them. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures effective against all such security threats. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies. There can be no assurance that we or our third-party service providers, contractors or consultants will be successful in preventing cyber-attacks or successfully mitigating their effects. Similarly, there can be no assurance that such third-party service providers, contractors or consultants will be successful in protecting our clinical and other data that is stored on their systems. If the IT systems of our third-party vendors and other contractors and consultants become subject to disruptions or security breaches, we may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring. Any cyber-attack or destruction or loss of data could have a material adverse effect on our business, financial condition, results of operations, and prospects. For example, if such an event were to occur and cause interruptions in our operations, or those of our third-party vendors and other contractors and consultants, it could result in a material disruption or delay of the development of our product candidates. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures. As cyber threats continue to evolve, we may be required to incur material additional expenses in order to enhance our protective measures or to remediate any information security vulnerability.

We expect to expand our organization, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations. We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of clinical development and regulatory

affairs, as well as to support our public company operations. We are currently constructing a new facility, designed for the development of a cGMP production process on a large industrial scale for market supply. To manage these growth activities, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Our management may need to devote a significant amount of its attention to managing these growth activities. Moreover, our expected growth could require us to relocate to a different geographic area of the country. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion or relocation of our operations, retain key employees, or identify, recruit and train additional qualified personnel. Our inability to manage the expansion or relocation of our operations effectively may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could also require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If we are unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate revenues could be reduced and we may not be able to implement our business strategy, including the successful development and commercialization of our product candidates. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We are subject to stringent privacy laws, information security laws, regulations, policies and contractual obligations related to data privacy and security and changes in such laws, regulations, policies and contractual obligations could adversely affect our business, financial condition, results of operations, and prospects.

We are subject to data privacy and protection laws and regulations that apply to the collection, transmission, storage and use of personally-identifying information, which among other things, impose certain requirements relating to the privacy, security and transmission of personal information. The legislative and regulatory landscape for privacy and data protection continues to evolve in jurisdictions worldwide, and there has been an increasing focus on privacy and data protection issues with the potential to affect our business. Failure to comply with any of these laws and regulations could result in enforcement action against us, including fines, imprisonment of company officials and public censure, claims for damages by affected individuals, damage to our reputation and loss of goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Additionally, if we are unable to properly protect the privacy and security of personal information, including protected health information, we could be found to have breached our contracts.

There are numerous U.S. federal and state laws and regulations related to the privacy and security of personal information. In particular, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, establish privacy and security standards that limit the use and disclosure of individually identifiable health information, or protected health information, and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can be complex and may be subject to changing interpretation. If we fail to comply with applicable privacy laws, including applicable HIPAA privacy and security standards, we could face civil and criminal penalties. The HHS has the discretion to impose penalties without attempting to first resolve violations. HHS enforcement activity can result in financial liability and reputational harm, and responses to such enforcement activity can consume significant internal resources. Even when HIPAA does not apply, failing to take appropriate steps to keep consumers' personal information secure can constitute unfair acts or practices in or affecting commerce and be construed as a violation of Section 5(a) of the Federal Trade Commission Act, or the FTCA, 15 U.S.C § 45(a). The Federal Trade Commission, or the FTC, expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards and the FTC's guidance for appropriately securing consumers' personal information is similar to what is required by the HIPAA Security Rule. In addition, state attorneys general are authorized to bring civil actions seeking either injunctions or damages in response to violations that threaten the

privacy of state residents. We cannot be sure how these regulations will be interpreted, enforced or applied to our operations. In addition to the risks associated with enforcement activities and potential contractual liabilities, our ongoing efforts to comply with evolving laws and regulations at the federal and state level may be costly and require ongoing modifications to our policies, procedures and systems.

In addition, many states in which we operate have laws that protect the privacy and security of personal information. For example, the California Consumer Privacy Act of 2018, or CCPA, which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. State laws are changing rapidly and there is discussion in Congress of a new federal data protection and privacy law to which we would become subject if it is enacted.

Internationally, laws, regulations and standards in many jurisdictions apply broadly to the collection, use, retention, security, disclosure, transfer and other processing of personal information. For example, in the European Union and the United Kingdom, the collection and use of personal data is governed by the provisions of the General Data Protection Regulation, or the GDPR, in addition to other applicable laws and regulations. The GDPR came into effect in May 2018, repealing and replacing the European Union Data Protection Directive, and imposing revised data privacy and security requirements on companies in relation to the processing of personal data of European Union and United Kingdom data subjects. The GDPR, together with national legislation, regulations and guidelines of the European Union member states and the United Kingdom governing the processing of personal data, impose strict obligations with respect to, and restrictions on, the collection, use, retention, protection, disclosure, transfer and processing of personal data. The GDPR authorizes fines for certain violations of up to 4% of the total global annual turnover of the preceding financial year or €20 million, whichever is greater. Such fines are in addition to any civil litigation claims by data subjects. Separately, Brexit could also lead to further legislative and regulatory changes and increase our compliance costs. In particular, the United Kingdom has transposed the GDPR into domestic law with a United Kingdom version of the GDPR taking effect in January 2021 (after the end of the transitional period) which could expose us to two parallel regimes each of which potentially authorizes fines for certain violations up to the greater of either 4% of the total global annual turnover of the preceding financial year or €20 million. Other jurisdictions outside the European Union are similarly introducing or enhancing privacy and data security laws, rules and regulations, which could increase our compliance costs and the risks associated with noncompliance. We cannot guarantee that we are, or will be, in compliance with all applicable international regulations as they are enforced now or as they evolve.

It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices and our efforts to comply with the evolving data protection rules may be unsuccessful. We must devote significant resources to understanding and complying with this changing landscape. Failure to comply with federal, state and international laws regarding privacy and security of personal information could expose us to penalties under such laws, orders requiring that we change our practices, claims for damages or other liabilities, regulatory investigations and enforcement action, litigation and significant costs for remediation, any of which could adversely affect our business. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which have a material adverse effect on our business, financial condition, results of operations, and prospects.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. We face and will continue to face competition from third parties that use mRNA, gene editing or gene therapy development platforms and from third parties focused on other therapeutic modalities, such as small molecules, antibodies, biologics and nucleic acid-based therapies. The competition is likely to come from multiple sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions.

Many of our potential competitors, alone or with their strategic partners, have substantially greater financial, technical and other resources, such as larger research and development, clinical, marketing and manufacturing organizations. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even greater concentration of resources among a smaller number of competitors. Our commercial opportunity could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approvals for their products faster or earlier than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, technologies developed by our competitors may render our product candidates uneconomical or obsolete, and we may not be successful in marketing our product candidates against competitors' products. In addition, the availability of our competitors' products could limit the demand and the prices we are able to charge for any products that we may develop and commercialize.

We depend heavily on our executive officers and managing directors, and the loss of their services would materially harm our business.

Our success depends, and will likely continue to depend, upon our ability to retain the services of our current executive officers, managing directors, principal consultants and other service providers, and our ability to hire new highly qualified personnel. We are highly dependent on the management, development, clinical, financial and business development expertise of our executive officers, managing directors, principal consultants and other service providers. In addition, we have established relationships with universities and research institutions which have historically provided, and continue to provide, us with access to research laboratories, clinical trials, facilities and patients. Our ability to compete in the biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel.

In most cases, our personnel may only terminate their employment upon first providing notice. A limited number of agreements provide for at-will termination. If we lose one or more of our executive officers or other key employees, our ability to implement our business strategy successfully could be seriously harmed. Furthermore, replacing executive officers or other key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain marketing approval of and commercialize products successfully.

We may be unable to hire, train, retain or motivate these additional key employees on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

Our employees, independent contractors, consultants, collaborators and contract research organizations may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk that our employees, independent contractors, consultants, collaborators and contract research organizations may engage in fraudulent conduct or other illegal activity. Misconduct by those parties could include intentional, reckless or negligent conduct or disclosure of unauthorized activities to us that violates: (i) FDA regulations or similar regulations of comparable non-U.S. regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities, (ii) manufacturing and clinical trial conduct standards, (iii) federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable non-U.S. regulatory authorities and (iv) laws that require the reporting of financial information or data accurately. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with

such laws, standards or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could have a material adverse effect on our ability to operate our business and our results of operations.

As a result of our geographically diverse operations, we are more susceptible to certain risks.

We have offices and operations in three cities and in two countries. If we are unable to manage the risks of our global operations, including fluctuations in foreign exchange and inflation rates, international hostilities, natural disasters, security breaches, failure to maintain compliance with our clients' control requirements and multiple legal and regulatory systems, our results of operations and ability to grow could be materially adversely affected.

Changes in our level of taxes, and audits, investigations and tax proceedings, could have a material adverse effect on our results of operations and financial condition.

Although limited in terms of magnitude due to ongoing losses incurred so far, we are subject to income taxes in Germany and the United States. We calculate and provide for income taxes in each tax jurisdiction in which we operate. Tax accounting often involves complex matters and judgment is required in determining our worldwide provision for income taxes and other tax liabilities. We are subject to ongoing tax audits in Germany. In the future, tax authorities may disagree with our judgments or may take increasingly aggressive positions with respect to the judgments we make. We regularly assess the likely outcomes of these audits in order to determine the appropriateness of our tax liabilities. However, our judgments might not be sustained as a result of these audits, and the amounts ultimately paid could be different from the amounts previously recorded. In addition, our effective tax rate in the future could be adversely affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities and changes in tax laws. Tax rates in the jurisdictions in which we operate may change as a result of macroeconomic or other factors outside of our control. Increases in the tax rate in any of the jurisdictions in which we operate could have a negative impact on our profitability. In addition, changes in tax laws, treaties or regulations, or their interpretation or enforcement, may be unpredictable, particularly in less developed markets, and could become more stringent, which could materially adversely affect our tax position. Any of these occurrences could have a material adverse effect on our results of operations and financial condition.

Changes in U.S. Tax Law Could Adversely Affect Our Business and Financial Condition.

On December 22, 2017, President Trump signed into law the "Tax Cuts and Jobs Act," or the TCJA, which significantly amends the Internal Revenue Code of 1986. Subject to the discussion of the Families First Coronavirus Response Act, or FFCR Act, and the CARES Act below, the TCJA, among other things, reduces the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limits the tax deduction for interest expense to 30% of adjusted taxable income, eliminates net operating loss carrybacks, imposes a one-time tax on offshore earnings at reduced rates regardless of whether they are repatriated, allows immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifies or repeals many business deductions and credits, including a reduction of the business tax credit for certain clinical testing expenses incurred in the testing of certain drugs for rare diseases or conditions generally referred to as "orphan drugs." We continue to examine the impact these changes may have on our business. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the TCJA is uncertain and our business and financial condition could be adversely affected.

As part of Congress's response to the COVID-19 pandemic, the FFCR Act was enacted on March 18, 2020, and the CARES Act was enacted on March 27, 2020. Both contain numerous tax provisions. In particular, the CARES Act retroactively and temporarily (for taxable years beginning before January 1, 2021) suspends application of the 80%-of-income limitation on the use of NOLs, which was enacted as part of the TCJA. It also provides that NOLs arising in any taxable year beginning after December 31, 2017,

and before January 1, 2021 are generally eligible to be carried back up to five years. The CARES Act also temporarily (for taxable years beginning in 2019 or 2020) relaxes the limitation of the tax deductibility for net interest expense by increasing the tax deduction cap from 30% to a 50% cap of adjusted taxable income. Regulatory guidance under the TCJA, the FFCR Act and the CARES Act is and continues to be forthcoming, and such guidance could ultimately increase or lessen impact of these laws on our business and financial condition. In addition, it is uncertain if and to what extent various states will conform to the TCJA, the FFCR Act or the CARES Act. Moreover, it is possible that Congress will enact additional legislation in connection with the COVID-19 pandemic, which could have an impact on our company.

We urge our shareholders, including purchasers of common shares in this offering, to consult with their legal and tax advisers with respect to the TCJA, the FFCR Act and the CARES Act and the potential tax consequences of investing in our common shares.

Uninsured losses arising from third-party claims brought against us could result in payment of substantial damages, which would decrease our cash reserves and could harm our profit and cash flow.

Our products are used in applications where the failure to use our products properly or their malfunction could result in serious bodily injury or death. We may not have adequate insurance to cover the payment of any potential claim related to such injuries or deaths. Insurance coverage may not continue to be available to us or, if available, may be at a significantly higher cost.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of pharmaceutical products.

The use of our investigational medicinal products in clinical trials and the sale of any approved products in the future may expose us to liability claims. These claims might be made by patients who use the product, health care providers, pharmaceutical companies or others selling such products. Any claims against us, regardless of their merit, could be difficult and costly to defend and could materially adversely affect the market for our product candidates or any prospects for commercialization of our product candidates.

Although the clinical trial process is designed to identify and assess potential side effects, it is always possible that a product, even after regulatory approval, may exhibit unforeseen side effects. If any of our product candidates were to cause adverse side effects during clinical trials or after approval of the product candidate, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates.

To cover such liability claims, we purchase clinical trial insurances in the conduct of each of our clinical trials. It is possible that our liabilities could exceed our insurance coverage or that our insurance will not cover all situations in which a claim against us could be made. We also intend to expand our insurance coverage to include the sale of commercial products if we receive marketing approval for any of our proprietary products. However, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy any liability that may arise. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired. Should any of the events described above occur, this could have a material adverse effect on our business, financial condition and results of operations, including, but not limited to:

- decreased demand for our future product candidates;
- adverse publicity and injury to our reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- compensation in response to a liability claim;

- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources; and
- the inability to commercialize our products or product candidates.

We could be adversely affected if we are subject to negative publicity. We could also be adversely affected if any of our products or any similar products distributed by other companies prove to be, or are asserted to be, harmful to patients. Any adverse publicity associated with illness or other adverse effects resulting from patients' use or misuse of our products or any similar products distributed by other companies could have a material adverse impact on our business, financial condition, results of operations or prospects.

Some of our product candidates are classified as gene therapies by the FDA and the EMA, and the FDA has indicated that products similar to our product candidates will be reviewed within its Center for Biologics Evaluation and Research, or CBER. Even though our mRNA product candidates are designed to have a different mechanism of action from gene therapies, the association of our product candidates with gene therapies could result in increased regulatory burdens, impair the reputation of our product candidates, or negatively impact our platform or our business.

There have been few approvals of gene therapy products in the United States and other jurisdictions, and there have been well-reported significant adverse events associated with their testing and use. Gene therapy products have the effect of introducing new DNA and potentially irreversibly changing the DNA in a cell. In contrast, mRNA is highly unlikely to localize to the nucleus, integrate into cell DNA, or otherwise make any permanent changes to cell DNA. Consequently, we expect that our product candidates will have a different potential side effect profile from gene therapies because they lack risks associated with altering cell DNA irreversibly. Further, we may avail ourselves of ways of mitigating side effects in developing our product candidates to address safety concerns that are not available to all gene therapies, such as lowering the dose of our product candidates during repeat dosing or stopping treatment to potentially ameliorate undesirable side effects.

Regulatory requirements governing gene and cell therapy products have evolved and may continue to change in the future, and the implications for mRNA-based medicines is unknown. For example, the FDA has established the Office of Tissues and Advanced Therapies within CBER to consolidate the review of gene therapy and related products, and convenes the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. In the European Union, mRNA has been characterized as a Gene Therapy Medicinal Product. In certain countries, mRNA therapies have not yet been classified or any such classification is not known to us. Specifically, in Japan, the Pharmaceuticals and Medical Devices Agency has not taken a position on the regulatory classification. Notwithstanding the differences between our mRNA product candidates and gene therapies, the classification of some of our mRNA product candidates as gene therapies in the United States, the European Union and potentially other countries could adversely impact our ability to develop our product candidates, and could negatively impact our platform and our business. For instance, a clinical hold on gene therapy products across the field due to risks associated with altering cell DNA irreversibly may apply to our mRNA product candidates irrespective of the mechanistic differences between gene therapies and mRNA.

Adverse events reported with respect to gene therapies or genome editing therapies could adversely impact one or more of our programs. Although our mRNA product candidates are designed not to make any permanent changes to cell DNA, regulatory agencies or others could believe that adverse effects of gene therapy products caused by introducing new DNA and irreversibly changing the DNA in a cell could also be a risk for our mRNA investigational therapies, and as a result may delay one or more of our trials or impose additional testing for long-term side effects. Any new requirements and guidelines promulgated by regulatory review agencies may have a negative effect on our business by lengthening the regulatory review process, requiring us to perform additional or larger studies, or increasing our development costs, any of which could lead to changes in regulatory positions and interpretations, delay or prevent advancement or approval and commercialization of our product candidates or lead to significant post-approval studies, limitations or restrictions. As we advance our product candidates, we will be required to consult with these

regulatory agencies and advisory committees and comply with applicable requirements and guidelines. If we fail to do so, we may be required to delay or discontinue development of some or all of our product candidates.

Risks Related to Our Common Shares and the Offering

There is no existing market for our common shares, and we do not know whether one will develop to provide you with adequate liquidity. If our share price fluctuates after this offering, you could lose a significant part of your investment, and you may not be able to sell your common shares at or above the initial public offering price.

Prior to this offering, there has not been a public market for our common shares. If an active trading market does not develop, you may have difficulty selling any of our common shares that you buy. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market on The Nasdaq Global Market, or otherwise, or how liquid that market might become. The initial public offering price for the common shares will be determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the open market following this offering. Consequently, you may not be able to sell our common shares at prices equal to or greater than the price paid by you in this offering. In addition to the risks described above, the market price of our common shares may be influenced by many factors, some of which are beyond our control, including:

- the failure of financial analysts to cover our common shares after this offering or changes in financial estimates by analysts;
- actual or anticipated variations in our operating results;
- changes in financial estimates by financial analysts, or any failure by us to meet or exceed any of these estimates, or changes in the recommendations of any financial analysts that elect to follow our common shares or the shares of our competitors;
- announcements by us or our competitors of significant contracts or acquisitions;
- future sales of our shares; and
- investor perceptions of us and the industries in which we operate.

These and other factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, the stock market in general has from time to time experienced extreme price and volume fluctuations, including in recent months, that have often been unrelated or disproportionate to the operating performance of particular companies affected. These broad market and industry factors may materially harm the market price of our common shares, regardless of our operating performance. In the past, following periods of volatility in the market price of certain companies' securities, securities class action litigation has been instituted against these companies. This litigation, if instituted against us, could adversely affect our financial condition or results of operations.

Sales of substantial amounts of our common shares in the public market, or the perception that these sales may occur, could cause the market price of our common shares to decline.

Sales of substantial amounts of our common shares in the public market, or the perception that these sales may occur, could cause the market price of our common shares to decline. This could also impair our ability to raise additional capital through the sale of our equity securities. Under our articles of association as they will read upon the closing of this offering, we will be authorized to issue up to common shares, of which common shares will be outstanding following this offering. We have agreed with the underwriters, subject to certain exceptions, not to offer, sell, or dispose of any shares of our share capital or securities convertible into or exchangeable or exercisable for any shares of our share capital during the 180-day period following the date of this prospectus. Our managing directors and our supervisory directors, as well as certain of our existing shareholders, have agreed to substantially similar lock-up provisions, subject to certain exceptions. Following the expiration of the lock-up period, our existing

shareholders may determine to sell their common shares, subject to certain restrictions. See “Description of Share Capital and Articles of Association.” We cannot predict the size of future issuances of our shares or the effect, if any, that future sales and issuances of shares would have on the market price of our common shares.

The trading price of our common shares may in the future be highly volatile, which could result in substantial losses for purchasers of our common shares in this offering, and a decline in our share price and invite securities litigation against our company or our management.

Our share price is likely to be highly volatile. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common shares at or above the public offering price and you may lose some or all of your investment. The market price for our common shares may be influenced by many factors, including:

- the results of our ongoing, planned or any future preclinical studies, clinical trials or clinical development programs;
- the timing, enrollment and results of clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- adverse results or delays in preclinical studies and clinical trials;
- regulatory actions with respect to our product candidates or our competitors’ products and product candidates;
- the success of existing or new competitive products or technologies;
- any delay in our development or regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority’s review of such filings, including without limitation the FDA’s issuance of a “refusal to file” letter or a request for additional information;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- commencement or termination of collaborations for our development programs;
- failure or discontinuation of any of our development programs;
- unanticipated serious safety concerns related to the use of our product candidates;
- our failure to commercialize our product candidates;
- results of clinical trials of product candidates of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key scientific or management personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- successful manufacturing of our products;
- the results of our efforts to develop additional product candidates or products;
- actual or anticipated changes in estimates as to financial results or development timelines;
- our cash position;
- trading volume of our common shares;
- announcement or expectation of additional financing efforts;

- sales of our common shares by us, our insiders or other shareholders;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in accounting practices or the ineffectiveness of our internal controls;
- changes in estimates or recommendations by securities analysts, if any, that cover our shares, or the withdrawal of research coverage by securities analysts;
- significant lawsuits, including patent or shareholder litigation;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors specifically;
- general economic, industry and market conditions; and
- the other factors described in this “Risk Factors” section.

In the past, securities class action litigation has often been brought against a company and its management following a decline in the market price of its securities. This risk is especially relevant for biopharmaceutical companies, which have experienced significant share price volatility in recent years. Such litigation, if instituted against us, could cause us or members of our management to incur substantial costs and divert management’s attention and resources from our business.

In addition, the trading prices for common stock of other biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic. The COVID-19 outbreak continues to rapidly evolve. The extent to which the outbreak may impact our business, preclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

We have broad discretion in the use of the net proceeds received by us from this offering and the concurrent private placement and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return on your investment.

Although we currently intend to use the net proceeds received by us from this offering and the concurrent private placement in the manner described in the section titled “Use of Proceeds” in this prospectus, our management has broad discretion in the application of the net proceeds from this offering and the concurrent private placement and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common shares. For example, we intend to use the net proceeds received by us from this offering and the concurrent private placement, together with cash and cash equivalents on hand, to pursue the approval of our product candidates for a number of indications, some of which may never reach approval, as well as for general corporate purposes. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering and the concurrent private placement. The failure by our management to apply these funds effectively could result in financial losses that could harm our business, cause the price of our common shares to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering and the concurrent private placement in a manner that does not produce income or that loses value.

Concentration of ownership by our principal shareholders may conflict with your interest and may prevent you from influencing significant corporate decisions.

Upon the completion of this offering, and after giving effect to (i) the consummation of the investments by Kreditanstalt für Wiederaufbau, or KfW, Glaxo Group Limited, Qatar Holding LLC, or QIA and several other investors, or together the 2020 Private Investment, (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million at a price per share equal to the public offering price in this public offering and (iii) our corporate reorganization, our principal shareholders dievini Hopp BioTech holding GmbH & Co. KG, Walldorf, or dievini, will beneficially own approximately % of our common shares, KfW will beneficially own approximately % of our common shares, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same (or % and %, respectively, if the underwriters exercise in full their option to purchase additional shares).

In addition, dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) will have the right under our articles of association to make a binding nomination for the following number of supervisory directors as of the closing of this offering until dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) ceases to own at least 10% of our issued share capital or an earlier change of control over dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) as defined by our articles of association, which period we refer to as the initial nomination period for dievini:

- four (4) supervisory directors for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates (as defined by our articles of association) and ultimate beneficiaries (as defined by our articles of association) (individually or collectively) owns at least 70% of our issued share capital;
- three (3) supervisory directors for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates (as defined by our articles of association) and ultimate beneficiaries (as defined by our articles of association) (individually or collectively) owns at least 50% (but less than 70%) of our issued share capital;
- two (2) supervisory directors for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates (as defined by our articles of association) and ultimate beneficiaries (as defined by our articles of association) (individually or collectively) owns at least 30% (but less than 50%) of our issued share capital; and
- one (1) supervisory director for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates (as defined by our articles of association) and ultimate beneficiaries (as defined by our articles of association) (individually or collectively) owns at least 10% (but less than 30%) of our issued share capital.

Dievini and Mr. Dietmar Hopp may be able to significantly influence all matters requiring shareholder approval. Even when dievini ceases to own common shares representing a majority of the total voting power, for so long as dievini continues to own a significant percentage of our common shares, dievini will still be able to significantly influence the composition of our supervisory board and the approval of actions requiring shareholder approval. Accordingly, for such period of time, dievini will continue to have significant influence with respect to our management, business plans and policies, including the appointment and removal of our managing directors, decisions on whether to raise future capital and amending our organizational documents, which govern the rights attached to our common shares. In particular, for so long as dievini continues to own a significant percentage of common shares, it will be able to cause or prevent a change of control of us or a change in the composition of our supervisory board and could preclude any unsolicited acquisition of us.

In addition, KfW (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) will have the right under our articles of association, the KfW dievini Shareholders' Agreement and the ISA to make a binding nomination for one (1) supervisory director until KfW or any KfW affiliates as defined by our articles of association (individually or together with any other KfW affiliate) ceases to own at least 10% of our issued share capital, which period we refer to as the initial nomination period for KfW. Certain decisions require, and cannot be taken without, a resolution of our supervisory board that the KfW nominee, and a dievini nominee, have approved. These relate in particular to the location within the European Union of certain of our activities. The KfW dievini Shareholders' Agreement includes provisions relating to voting together and in a coordinated fashion on certain specified matters as further described under "Related Party Transactions."

The concentration of ownership and these nomination rights could deprive you of an opportunity to receive a premium for your common shares as part of a sale of us and ultimately might affect the market price of our common shares. In addition, the concentration of voting power and these nomination rights could delay or prevent an acquisition of our company on terms that other shareholders may desire or result in the management of our company in ways with which other shareholders disagree.

We may be required to redeem for cash all, or to facilitate the purchase by a third party of all, the shares of us held by the Bill & Melinda Gates Foundation as per the date of the ISA if we default under the Global Access Agreement, which could have an adverse impact on us and limit our ability to make distributions to our shareholders.

We entered into a Global Access Agreement with our shareholder, the Bill & Melinda Gates Foundation, in February 2015 pursuant to which we are required to take certain actions to support the Bill & Melinda Gates Foundation's mission. In the event that we commit a material breach of the Global Access Agreement or certain provisions of the ISA, following a cure period, we may be required to redeem for cash all, or to facilitate the purchase by a third party of all, the shares of our company held by the Bill & Melinda Gates Foundation as per the date of the ISA at certain terms that may not be favorable to us. If this occurs, cash used for this purpose may, adversely affect our liquidity, cause us to reduce expenditures in other areas of our business, or curtail our growth plans. If we do not have sufficient cash on hand to purchase the shares, we would have to seek financing alternatives in order to meet our obligations, and there is no certainty that financing would be available on reasonable terms or at all. For the period that we are unable to redeem the shares held by the Bill & Melinda Gates Foundation or arrange for a third party to purchase such shares, we will generally not be allowed to pay dividends, redeem the shares of any other shareholder or otherwise make any other distribution to any of our shareholders in connection with their shares. Therefore, meeting this purchase obligation, if necessary, could have a material adverse effect on our business and financial results. For more information on the Bill & Melinda Gates Foundation's withdrawal rights, see "Related Party Transactions — Investment and Shareholders' Agreement."

Transformation into a public company may increase our costs and disrupt the regular operations of our business.

This offering will have a significant transformative effect on us. Our business historically has operated as a privately owned company, and we expect to incur significant additional legal, accounting, reporting and other expenses as a result of having publicly traded common shares. We will also incur costs which we have not incurred previously, including, but not limited to, costs and expenses for managing directors' and supervisory directors' fees, increased directors and officers insurance, investor relations, and various other costs of a public company.

We also anticipate that we will incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, as well as rules implemented by the SEC and Nasdaq. We expect these rules and regulations to increase our legal and financial compliance costs and make some management and corporate governance activities more time-consuming and costly, particularly after we are no longer an "emerging growth company." These rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. This could have an adverse impact on our ability to retain, recruit and bring on a qualified independent supervisory board. We expect that the additional costs we will incur as a public company, including costs associated with corporate governance requirements, will be considerable relative to our costs as a private company.

The additional demands associated with being a public company may disrupt regular operations of our business by diverting the attention of some of our senior management team away from revenue producing activities to management and administrative oversight, adversely affecting our ability to attract and complete business opportunities and increasing the difficulty in both retaining professionals and managing and growing our businesses. Any of these effects could harm our business, financial condition and results of operations.

For as long as we are an "emerging growth company" under the recently enacted JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We could be an emerging growth company for up to five years. See "Prospectus Summary — Implications of Being an Emerging Growth Company." Furthermore, after the date we are no longer an emerging growth company, our independent registered public accounting firm will only be required to attest to the effectiveness of our internal control over financial reporting depending on our market capitalization. Even if our management

concludes that our internal controls over financial reporting are effective, our independent registered public accounting firm may still decline to attest to our management's assessment or may issue a report that is qualified if it is not satisfied with our controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. In addition, in connection with the implementation of the necessary procedures and practices related to internal control over financial reporting, we may identify deficiencies that we may not be able to remediate in time to meet the deadline imposed by the Sarbanes-Oxley Act for compliance with the requirements of Section 404. Failure to comply with Section 404 could subject us to regulatory scrutiny and sanctions, impair our ability to raise revenue, cause investors to lose confidence in the accuracy and completeness of our financial reports and negatively affect our share price.

We are a foreign private issuer and, as a result, we are not subject to U.S. proxy rules and are subject to Exchange Act reporting obligations that, to some extent, are more lenient and less frequent than those of a U.S. domestic public company.

We report under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as a non-U.S. company with foreign private issuer status. Because we qualify as a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including (i) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act, (ii) the sections of the Exchange Act requiring insiders to file public reports of their share ownership and trading activities and liability for insiders who profit from trades made in a short period of time and (iii) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events. In addition, foreign private issuers are not required to file their annual report on Form 20-F until four months after the end of each fiscal year, while U.S. domestic issuers that are accelerated filers are required to file their annual report on Form 10-K within 75 days after the end of each fiscal year. Foreign private issuers are also exempt from the Regulation Fair Disclosure, aimed at preventing issuers from making selective disclosures of material information. As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

We may lose our foreign private issuer status which would then require us to comply with the Exchange Act's domestic reporting regime and cause us to incur significant legal, accounting and other expenses.

We are a foreign private issuer and therefore we are not required to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers. If in the future we are not a foreign private issuer as of the last day of the second fiscal quarter in any fiscal year, we would be required to comply with all of the periodic disclosure, current reporting requirements and proxy solicitation rules of the Exchange Act applicable to U.S. domestic issuers. In order to maintain our current status as a foreign private issuer, either (a) a majority of our common shares must be either directly or indirectly owned of record by non-residents of the United States or (b)(i) a majority of our managing directors, supervisory directors and executive officers may not be United States citizens or residents, (ii) more than 50% of our assets cannot be located in the United States and (iii) our business must be administered principally outside the United States. If we were to lose this status, we would be required to comply with the Exchange Act reporting and other requirements applicable to U.S. domestic issuers, which are more detailed and extensive than the requirements for foreign private issuers. We may also be required to make changes in our corporate governance practices in accordance with various SEC and stock exchange rules. The regulatory and compliance costs to us if we are required to comply with the reporting requirements applicable to a U.S. domestic issuer may be significantly higher than the costs we would incur as a foreign private issuer. As a result, we expect that a loss of foreign private issuer status would increase our legal and financial compliance costs and would make some activities highly time consuming and costly. These rules and regulations could also make it more difficult for us to attract and retain qualified managing directors and supervisory directors.

As a foreign private issuer and as permitted by the listing requirements of Nasdaq, we follow certain home country governance practices rather than the corporate governance requirements of Nasdaq.

We are a foreign private issuer. As a result, in accordance with the listing requirements of Nasdaq we will rely on home country governance requirements and certain exemptions thereunder rather than relying on the corporate governance requirements of Nasdaq. In accordance with Dutch law and generally accepted business practices, our articles of association do not provide quorum requirements generally applicable to general meetings. To this extent, our practice varies from the requirement of Nasdaq Listing Rule 5620(c), which requires an issuer to provide in its bylaws for a generally applicable quorum, and that such quorum may not be less than one-third of the outstanding voting shares. Although we must provide shareholders with an agenda and other relevant documents for the general meeting, Dutch law does not have a regulatory regime for the solicitation of proxies and the solicitation of proxies is not a generally accepted business practice in the Netherlands, thus our practice will vary from the requirement of Nasdaq Listing Rule 5620(b). As permitted by the listing requirements of Nasdaq, we have also opted out of the requirements of Nasdaq Listing Rule 5605(d), which requires, among other things, an issuer to have a compensation committee that consists entirely of independent directors, Nasdaq Listing Rule 5605(e), which requires independent director oversight of director nominations, and Nasdaq Listing Rule 5605(b)(1), which requires an issuer to have a majority of independent directors on its board. We will also rely on the phase-in rules of the SEC and Nasdaq with respect to the independence of our audit committee. These rules require that a majority of our supervisory directors must be independent and all members of our audit committee must meet the independence standard for audit committee members within one year of the effectiveness of the registration statement of which this prospectus forms a part. In addition, we have opted out of shareholder approval requirements, as included in the Nasdaq Listing Rules, for the issuance of securities in connection with certain events such as the acquisition of shares or assets of another company, the establishment of or amendments to equity-based compensation plans for employees, a change of control of our company and certain private placements. To this extent, our practice varies from the requirements of Nasdaq Rule 5635, which generally requires an issuer to obtain shareholder approval for the issuance of securities in connection with such events. For an overview of our corporate governance principles, see “Description of Share Capital and Articles of Association.” Accordingly, you may not have the same protections afforded to shareholders of companies that are subject to these Nasdaq requirements.

Although we do not believe that we were a “passive foreign investment company,” or a PFIC, for U.S. federal income tax purposes for our 2019 taxable year, we have not yet determined our expected PFIC status for the current taxable year or any future taxable year. A U.S. holder of common shares may suffer adverse U.S. federal income tax consequences if we are a PFIC for any taxable year.

Under the Internal Revenue Code of 1986, as amended, or the Code, we will generally be a PFIC for any taxable year in which, after the application of certain look-through rules with respect to subsidiaries, either (i) 75% or more of our gross income consists of “passive income,” or (ii) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, “passive income.” Passive income generally includes dividends, interest, certain non-active rents and royalties, and capital gains. The value of a non-U.S. corporation’s goodwill that is associated with activities that produce or are intended to produce active income is generally an active asset for purposes of the asset test unless, for U.S. federal income tax purposes, the non-U.S. corporation is a “controlled foreign corporation” (CFC) that is not publicly traded “for the taxable year.” If a non-U.S. corporation is a CFC that is not publicly traded for the taxable year, its PFIC status under the asset test is determined by using the U.S. tax basis of its assets rather than their fair market value and therefore the market value of its goodwill is generally disregarded. Generally, a non-U.S. corporation is a CFC if more than 50% of its shares’ voting power or value is owned, directly, indirectly or constructively, by “United States shareholders” (as defined in Section 951(b) of the Code). Although it is not certain, we may be or may have been a CFC in the current taxable year. However, under recently proposed Treasury regulations (the preamble to which specifies that a taxpayer may generally choose to apply them in their entirety prior to their finalization provided that the taxpayer consistently applies them), or the Proposed Regulations, the fair market value of our assets (including goodwill) can be used for purposes of the asset test provided that (i) we are publicly traded on the majority of days during our taxable year or (ii) we would not be a CFC if certain constructive ownership rules were not applied. Although no assurances may be given in this regard, we expect that we would be eligible in our 2020 taxable year to use the fair market value of our assets for purposes of the asset test, and U.S. investors

are urged to consult their tax advisers whether they could apply the Proposed Regulations for purposes of the asset test. The remainder of this discussion assumes that U.S. Holders will choose to apply the Proposed Regulations in their entirety.

Based on the composition of our income and assets during 2019, we do not believe that we were a PFIC for our 2019 taxable year. However, PFIC status is a fact-intensive determination made on an annual basis after the end of each taxable year, and we have not yet determined our expected PFIC status for the current taxable year or any future taxable year. Whether we will be a PFIC in 2020 or any future year is uncertain because, among other things, (i) we currently own, and will own after the closing of this offering, a substantial amount of passive assets, including cash, (ii) the valuation of our assets that generate non-passive income for PFIC purposes, including our intangible assets, is uncertain and may vary substantially over time, (iii) the treatment of grants as income for U.S. federal income tax purposes is unclear, and (iv) the composition of our income may vary substantially over time. Accordingly, there can be no assurance that we will not be a PFIC in 2020 or any future taxable year.

If we are a PFIC for any taxable year during which a U.S. investor holds common shares, we generally would continue to be treated as a PFIC with respect to that U.S. investor for all succeeding years during which the U.S. investor holds common shares, even if we ceased to meet the threshold requirements for PFIC status. Such a U.S. investor may be subject to adverse U.S. federal income tax consequences, including (i) the treatment of all or a portion of any gain on disposition as ordinary income, (ii) the application of a deferred interest charge on such gain and the receipt of certain dividends and (iii) compliance with certain reporting requirements. There is no assurance that we will provide information that will enable investors to make a qualified electing fund election, also known as a QEF Election, that could mitigate the adverse U.S. federal income tax consequences should we be classified as a PFIC. See “Taxation — Material U.S. Federal Income Tax Considerations to U.S. Holders.”

We are an “emerging growth company” and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common shares less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act. We cannot predict if investors will find our common shares less attractive because we will rely on these exemptions. We could be an emerging growth company for up to five years following the year in which we complete this offering, although circumstances could cause us to lose that status earlier. We would cease to be an emerging growth company upon the earliest to occur of (i) the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; (ii) the date we qualify as a “large accelerated filer” with at least \$700 million of equity securities; (iii) the issuance, in any three-year period, by our company of more than \$1.0 billion in non-convertible debt securities held by non-affiliates; and (iv) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Given that we currently report and expect to continue to report under IFRS as issued by the IASB, we have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required by the IASB. Since IFRS makes no distinction between public and private companies for purposes of compliance with new or revised accounting standards, the requirements for our compliance as a private company and as a public company are the same.

We cannot predict if investors will find our common shares less attractive because we may rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

Insiders will continue to have substantial control over us after this offering and could limit your ability to influence the outcome of key transactions, including a change of control.

Our principal shareholders, managing directors, supervisory directors and executive officers and entities affiliated with them will own approximately % of the outstanding common shares after the closing of this offering. As a result, these shareholders, if acting together, would be able to influence or control matters requiring approval by our general meeting, including the appointment of managing directors and supervisory directors, changes to our articles of association and approval of mergers or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. The concentration of ownership may have the effect of delaying, preventing or deterring a change of control of our company, could deprive our shareholders of an opportunity to receive a premium for their common shares as part of a sale of our company and might ultimately affect the market price of our common shares.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our common shares would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrades our common shares or publishes inaccurate or unfavorable research about our business, our share price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our shares could decrease, which might cause our share price and trading volume to decline.

We do not anticipate paying any cash dividends in the foreseeable future.

We currently intend to retain our future earnings, if any, for the foreseeable future, to fund the development and growth of our business. We do not intend to pay any dividends to holders of our common shares. As a result, capital appreciation in the price of our common shares, if any, will be your only source of gain on an investment in our common shares.

If we do pay dividends, we may need to withhold tax on such dividends payable to holders of our shares in both Germany and the Netherlands.

We do not intend to pay any dividends to holders of our common shares. See “Risk Factors — We do not anticipate paying any cash dividends in the foreseeable future.” However, if we do pay dividends, we may need to withhold tax on such dividends both in Germany and the Netherlands.

As an entity incorporated under Dutch law, any dividends distributed by us are subject to Dutch dividend withholding tax on the basis of Dutch domestic law. However, on the basis of the 2012 Convention between the Federal Republic of Germany and the Kingdom of the Netherlands for the avoidance of double taxation with respect to taxes on income, or the “double tax treaty between Germany and the Netherlands,” the Netherlands will be restricted in imposing these taxes if we are also a tax resident of Germany and our effective management is located in Germany, or the withholding tax restriction. See also “— We may become taxable in a jurisdiction other than Germany and this may increase the aggregate tax burden on us.” The withholding tax restriction does, however, not apply, and Dutch dividend withholding tax is still required to be withheld from dividends, if and when paid to Dutch resident holders of our common shares (and non-Dutch resident holders of our common shares that have a permanent establishment in the Netherlands to which their shareholding is attributable). As a result, upon a payment of dividends, we will be required to identify our shareholders in order to assess whether there are Dutch residents (or non-Dutch residents with a permanent establishment in the Netherlands to which the common shares are attributable) in respect of which Dutch dividend tax has to be withheld. Such identification may not always be possible in practice. If the identity of our shareholders cannot be determined, withholding of both German and Dutch dividend tax may occur upon a payment of dividends.

Furthermore, the withholding tax restriction referred to above is based on the current reservation made by Germany under the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, or the MLI, with respect to the tie-breaker provision included in Article 4(3) of the double tax treaty between Germany and the Netherlands, or the MLI tie-breaker reservation. If Germany changes its MLI tie-breaker reservation, we will not be entitled to any benefits of the double tax treaty between Germany and the Netherlands, including the withholding tax restriction, as long as Germany and the Netherlands do not reach an agreement on our tax residency for purposes of the double tax treaty between Germany and the Netherlands, and, as a result, any dividends distributed by us during the period no such agreement has been reached between Germany and the Netherlands, may be subject to withholding tax both in Germany and the Netherlands.

Our ability to use our net operating loss carryforwards and other tax attributes may be limited.

Our ability to utilize our net operating losses, or NOLs, is currently limited, and may be limited further, under Section 8c of the German Corporation Income Tax Act (*Körperschaftsteuergesetz*, or KStG) and Section 10a of the German Trade Tax Act (*Gewerbesteuergesetz*, or GewStG). These limitations apply if a qualified ownership change, as defined by Section 8c KStG, occurs and no exemption is applicable.

Generally, a qualified ownership change occurs if more than 50% of the share capital or the voting rights are directly or indirectly transferred to a shareholder or a group of shareholders within a period of five years. A qualified ownership change may also occur in case of a transaction comparable to a transfer of shares or voting rights or in case of an increase in capital leading to a respective change in the shareholding. In the case of such a qualified ownership change tax loss carryforwards expire in full. To the extent that the tax loss carryforwards do not exceed the built-in gains (*stille Reserven*) in the assets and liabilities taxable in Germany, they may be further utilized despite a qualified ownership change. In case of a qualified ownership change within a group, tax loss carryforwards will be preserved if certain conditions are satisfied. In case of a qualified ownership change, tax loss carryforwards will be preserved (in the form of a “fortführungsgebundener Verlustvortrag”) if the business operations have not been changed and will not be changed within the meaning of Section 8d KStG.

According to an appeal filed by the fiscal court of Hamburg dated August 29, 2017, Section 8c, paragraph 1, sentence 1 KStG is not in line with the German constitution. The appeal is still pending. It is unclear when the Federal Constitutional Court will decide this case.

As of March 31, 2020, there are NOLs of CureVac AG and CureVac Real Estate GmbH for German corporate tax purposes of approximately €435,124,000: €415,205,000 for CureVac AG and €19,919,000 for CureVac Real Estate GmbH and for German trade tax purposes of approximately €432,813,000: €413,225,000 for CureVac AG and €19,588,000 for CureVac Real Estate GmbH available. The intended contribution of 100% of CureVac AG’s shares into CureVac B.V. qualifies as an ownership change within the meaning of Section 8c KStG and Section 10a GewStG. The available tax loss carryforwards of CureVac AG and CureVac Real Estate GmbH will generally expire in full. However, the NOLs would not be forfeited to the extent that CureVac AG and CureVac Real Estate GmbH have built-in gains in their assets that are fully taxable in Germany. The built-in gains are determined by comparing the Fair Market Value of the respective entity with the entity’s tax book equity. A preliminary determination of the built-in gains has shown that all of the tax loss carry forwards would be maintained.

Future changes in share ownership may also trigger an ownership change and, consequently, a Section 8c KStG or a Section 10a GewStG limitation. Any limitation may result in the expiration of a portion or the complete tax operating loss carryforwards before they can be utilized. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to reduce German income tax may be subject to limitations, which could potentially result in increased future cash tax liability to us.

Investors purchasing common shares in this offering will experience immediate and substantial dilution as a result of this offering and any future equity issuances.

The initial public offering price of our common shares is substantially higher than the pro forma net tangible book value per common share. Dilution is the difference between the initial public offering price per common share and the pro forma net tangible book value per common share after this offering. If you purchase common shares in this offering, you will incur immediate and substantial dilution in the amount of \$ _____ per common share. We also have approximately _____ outstanding share options to purchase common shares with exercise prices that are below the assumed initial public offering price of the common shares. To the extent that these options are exercised, there will be further dilution. See “Dilution.”

Shareholders may not be able to exercise preemptive rights and, as a result, may experience substantial dilution upon future issuances of common shares.

In the event of an issuance of common shares, subject to certain exceptions, each shareholder will have a pro rata preemptive right in proportion to the aggregate nominal value of the common shares held by such holder. These preemptive rights may be restricted or excluded by a resolution of the general meeting or by another corporate body designated by the general meeting. Prior to the closing of this offering, our management board, subject to approval of our supervisory board, will be authorized, for a period of five years to issue shares or grant rights to subscribe for shares up to our authorized share capital from time to time and to limit or exclude preemptive rights in connection therewith. This could cause existing shareholders to experience substantial dilution of their interest in us.

We may become taxable in a jurisdiction other than Germany and this may increase the aggregate tax burden on us.

Since our incorporation we have had, on a continuous basis, our place of “effective management” in Germany. We will therefore qualify as a tax resident of Germany on the basis of German domestic law. As an entity incorporated under Dutch law, however, we also qualify as a tax resident of the Netherlands on the basis of Dutch domestic law. However, based on our current management structure and the current tax laws of the United States, Germany and the Netherlands, as well as applicable income tax treaties, and current interpretations thereof, we should qualify solely as a tax resident of Germany for the purposes of the double tax treaty between Germany and the Netherlands due to the “effective management” tie-breaker included in Article 4(3) of the double tax treaty between Germany and the Netherlands.

The test of “effective management” is largely a question of fact and degree based on all the circumstances, rather than a question of law. Nevertheless, the relevant case law and OECD guidance suggest that our company is likely to be regarded as having become German tax resident from incorporation and remaining so if, as our company intends, (i) most meetings of its management board are prepared and held in Germany (and none will be held in the Netherlands) with a majority of managing directors present in Germany for those meetings; (ii) at those meetings there are full discussions of, and decisions are made regarding, the key strategic issues affecting our company and its subsidiaries; (iii) those meetings are properly minuted; (iv) a majority of our managing directors, together with supporting staff, are based in Germany; and (v) our company has permanent staffed office premises in Germany. We may, however, become subject to limited income tax liability in other countries with regard to the income generated in the respective other country, for example, due to the existence of a permanent establishment or a permanent representative in such other country.

The applicable tax laws or interpretations thereof may change. Furthermore, whether we have our place of effective management in Germany and are as such tax resident in Germany is largely a question of fact and degree based on all the circumstances, rather than a question of law, which facts and degree may also change. Changes to applicable laws or interpretations thereof, changes to applicable facts and circumstances (for example, a change of directors or the place where board meetings take place), or changes to applicable income tax treaties, including a change to the MLI tie-breaker reservation, may result in us becoming (also) a tax resident of the Netherlands or another jurisdiction. See “— If we do pay dividends, we may need to withhold tax on such dividends payable to holders of our shares in both Germany and the Netherlands.” As a consequence, our overall effective income tax rate and income tax expense could materially increase, which could have a material adverse effect on our business, results of operations, financial condition and

prospects, which could cause our share price and trading volume to decline. In addition, as a consequence, dividends distributed by us, if any, may become subject to dividend withholding tax in more than one jurisdiction. The double taxation of income and the double withholding tax on dividends may be reduced or avoided entirely under the double tax treaty between Germany and the Netherlands or under a double tax treaty between the Netherlands and the respective other country.

Claims of U.S. civil liabilities may not be enforceable against us.

We are incorporated under the laws of the Netherlands, and our headquarters is located in Germany. Most of our assets are located outside the United States. The majority of our managing directors and supervisory directors reside outside the United States. As a result, it may not be possible for investors to effect service of process within the United States upon such persons or to enforce against them or us in U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States.

There is currently no treaty between the United States and the Netherlands for the mutual recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the U.S. federal securities laws, would not be enforceable in the Netherlands unless the underlying claim is relitigated before a Dutch court of competent jurisdiction. Under current practice, however, a Dutch court will generally, subject to compliance with certain procedural requirements, grant the same judgment without a review of the merits of the underlying claim if such judgment (i) is a final judgment and has been rendered by a court which has established its jurisdiction vis-à-vis the relevant Dutch companies or Dutch company, as the case may be, on the basis of internationally accepted grounds of jurisdiction, (ii) has not been rendered in violation of principles of proper procedure (*behoorlijke rechtspleging*), (iii) is not contrary to the public policy of the Netherlands, and (iv) is not incompatible with (a) a prior judgment of a Dutch court rendered in a dispute between the same parties, or (b) a prior judgment of a foreign court rendered in a dispute between the same parties, concerning the same subject matter and based on the same cause of action, provided that such prior judgment is capable of being recognized in the Netherlands and except to the extent that the foreign judgment contravenes Dutch public policy (*openbare orde*). Dutch courts may deny the recognition and enforcement of punitive damages or other awards. Moreover, a Dutch court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages. Enforcement and recognition of judgments of U.S. courts in the Netherlands are solely governed by the provisions of the Dutch Code of Civil Procedure.

The United States and Germany currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments, in civil and commercial matters. Consequently, a final judgment for payment or declaratory judgments given by a court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in Germany. German courts may deny the recognition and enforcement of a judgment rendered by a U.S. court if they consider the U.S. court not to be competent or the decision to be in violation of German public policy principles. For example, judgments awarding punitive damages are generally not enforceable in Germany. A German court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages.

In addition, actions brought in a German court against us, our managing directors, our supervisory directors, our senior management and the experts named herein to enforce liabilities based on U.S. federal securities laws may be subject to certain restrictions. In particular, German courts generally do not award punitive damages. Litigation in Germany is also subject to rules of procedure that differ from the U.S. rules, including with respect to the taking and admissibility of evidence, the conduct of the proceedings and the allocation of costs. German procedural law does not provide for pre-trial discovery of documents, nor does Germany support pre-trial discovery of documents under the 1970 Hague Evidence Convention. Proceedings in Germany would have to be conducted in the German language and all documents submitted to the court would, in principle, have to be translated into German. For these reasons, it may be difficult for a U.S. investor to bring an original action in a German court predicated upon the civil liability provisions of the U.S. federal securities laws against us, our managing directors, our supervisory directors, our senior management and the experts named in this prospectus.

Based on the foregoing, there can be no assurance that U.S. investors will be able to enforce against us or managing directors, supervisory directors, executive officers or certain experts named herein who are residents of or possessing assets in the Netherlands, Germany, or other countries other than the United States any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

Upon the closing of this offering, we will be a Dutch public company. The rights of our shareholders may be different from the rights of shareholders in companies governed by the laws of U.S. jurisdictions and may not protect investors in a similar fashion afforded by incorporation in a U.S. jurisdiction.

Upon the closing of this offering, we will be a public company (*naamloze vennootschap*) organized under the laws of the Netherlands. Our corporate affairs are governed by our articles of association, the rules of our management board and those of our supervisory board and by the laws governing companies incorporated in the Netherlands. However, there can be no assurance that Dutch law will not change in the future or that it will serve to protect investors in a similar fashion afforded under corporate law principles in the United States, which could adversely affect the rights of investors.

The rights of shareholders and the responsibilities of managing directors and supervisory directors may be different from the rights and obligations of shareholders and directors in companies governed by the laws of U.S. jurisdictions. In the performance of their duties, our managing directors and supervisory directors are required by Dutch law to consider the interests of our company, its shareholders, its employees and other stakeholders, in all cases with due observation of the principles of reasonableness and fairness. It is possible that some of these parties will have interests that are different from, or in addition to, your interests as a shareholder.

For more information on relevant provisions of Dutch corporation law and of our articles of association, see “Description of Share Capital and Articles of Association” and “Comparison of Dutch Corporate Law and U.S. Corporate Law.”

Provisions of our articles of association or Dutch corporate law might deter acquisition bids for us that might be considered favorable and prevent, delay or frustrate any attempt to replace or remove our managing directors or supervisory directors.

Under Dutch law, various protective measures are possible and permissible within the boundaries set by Dutch law and Dutch case law. In this respect, our general meeting shall authorize our management board, subject to the approval by our supervisory board, to grant a call option to an independent foundation under Dutch law (if and when incorporated), or protective foundation, to acquire preferred shares pursuant to a call option agreement, or the call option agreement, that may be entered into between us and such protective foundation after the later of (a) dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders’ Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) no longer holding at least 25% of our issued share capital (or an earlier change of control over dievini, as defined in our articles of association), which we refer to as the initial period, or (b) the termination or expiry of the KfW dievini Shareholders’ Agreement (see “Related Party Transactions — Shareholders’ Agreement Among KfW, dievini and Mr. Hopp” for further information on that agreement), which we refer to as the initial approval period.

This call option, if and when granted, shall be continuous in nature and can be exercised repeatedly on multiple occasions. If the protective foundation, if and when incorporated, would exercise such call option, if and when granted, a number of preferred shares up to 100% of our issued share capital held by others than the protective foundation, minus one share, will be issued to the protective foundation. These preferred shares would then be issued to the protective foundation under the obligation to pay up 25% of their nominal value upon issuance. In order for the protective foundation to finance the issue price in relation to the preferred shares, the protective foundation may enter into a finance arrangement with a bank or other financial institution. As an alternative to securing this external financing, subject to applicable restrictions under Dutch law, the call option agreement, if and when entered into, will provide that the protective foundation may request us to provide, or cause our subsidiaries to provide, sufficient funding to the protective foundation to enable it to satisfy the payment obligation (or part thereof) in cash and/or to charge an

amount equal to the payment obligation (or part thereof) against our profits and/or reserves in satisfaction of such payment obligation. The articles of association of the protective foundation, if and when incorporated, will provide that it will promote and protect the interests of the company, the business connected with the company and the company's stakeholders from time to time, and repressing possible influences which could threaten the strategy, continuity, independence and/or identity of the company or the business connected with it, to such an extent that this could be considered to be damaging to the aforementioned interests. These influences may include a third party acquiring a significant percentage of our common shares, the announcement of an unsolicited public offer for our common shares, shareholder activism, other concentration of control over our common shares or any other form of undue pressure on us to alter our strategic policies. The protective foundation, if and when incorporated, shall be structured to operate independently of us.

The voting rights of our shares are based on nominal value and, as we expect our common shares to trade substantially in excess of their nominal value, preferred shares issued at 25% of their nominal value can carry significant voting power for a substantially reduced price compared to the price of our common shares and thus can be used as a defensive measure. These preferred shares, if and when issued, will have both a liquidation and dividend preference over our common shares and will accrue cash dividends at a fixed rate calculated over the amount paid-up on those preferred shares pro rata tempore for the period during which they were outstanding. The protective foundation would be expected to require us to cancel its preferred shares, if and when issued to the protective foundation, once the perceived threat to the company and its stakeholders has been removed or sufficiently mitigated or neutralized. However, subject to the same limitations described above, the protective foundation would, in that case, continue to have the right to exercise the call option in the future in response to a new threat to the interests of us, our business and our stakeholders from time to time.

In addition, certain provisions of our articles of association may make it more difficult for a third-party to acquire control of us or effect a change in our management board and supervisory board. These include:

- a provision that our managing directors and supervisory directors are appointed on the basis of a binding nomination, the binding nature of which can only be overruled by a simple majority of votes cast representing at least one-third of our issued share capital;
- a provision that our managing directors and supervisory directors may only be dismissed by the general meeting by a two-thirds majority of votes cast representing more than 50% of our issued share capital (unless the dismissal is proposed by the supervisory board or, with respect to supervisory directors nominated by dievini or KfW, by dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for dievini or by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for KfW, respectively, in which case a simple majority of the votes would be sufficient);
- a provision that certain provisions of our articles of association can only be amended with the affirmative vote of (i) during the nomination period for dievini, dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and (ii) during the nomination period for KfW, KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement);
- a provision that if a supervisory director is no longer in office or is unable to act, he or she may be replaced temporarily by a person who the supervisory board has designated for that purpose and, where a supervisory director who has been appointed upon a nomination of dievini or KfW, as applicable, is no longer in office or unable to act, such supervisory director may only be temporarily replaced by a person designated for such purposes by dievini or KfW, as applicable. Such person shall become a full member of the supervisory board with the rights of the relevant supervisory director appointed upon a nomination of dievini or KfW, as applicable, as soon as a written designation to that effect has been received by the chairman or vice-chairman of our supervisory board, subject to limitations, under applicable law regarding dievini's rights under this provision;

- a provision allowing, among other matters, a former chairman of our supervisory board, a former nominee of dievini, and a former nominee of KfW to jointly take on the supervisory functions, which persons jointly may designate one or more other persons to be charged with the supervision of our company (instead of or together with the former chairman of our supervisory board), as applicable, to supervise our affairs if all of our supervisory directors are removed from office and to appoint others to be charged with the supervision of our affairs, until new supervisory directors are appointed by the general meeting on the basis of a binding nomination discussed above;
- a provision allowing the management board to temporarily replace a managing director who is no longer in office or unable to act, with another person or persons designated for this purpose by the management board and attributing the management of the company to the supervisory board in case all managing directors are no longer in office or unable to act; and
- a requirement that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our management board with the approval of our supervisory board.

In addition, Dutch law allows for staggered multi-year terms of our managing directors and supervisory directors, as a result of which only part of our managing directors and supervisory directors may be subject to appointment or re-appointment in any one year.

We are not obligated to, and do not, comply with all best practice provisions of the Dutch Corporate Governance Code.

Upon the closing of this offering, we will be subject to the Dutch Corporate Governance Code, or the DCGC. The DCGC contains both principles and best practice provisions on corporate governance that regulate relations between the management board, the supervisory board and the general meeting and matters in respect of financial reporting, auditors, disclosure, compliance and enforcement standards. The DCGC is based on a “comply or explain” principle. Accordingly, companies are required to disclose in their annual reports, filed in the Netherlands, whether they comply with the provisions of the DCGC. If they do not comply with those provisions (for example, because of a conflicting Nasdaq requirement), the company is required to give the reasons for such noncompliance. The DCGC applies to Dutch companies listed on a government-recognized stock exchange, whether in the Netherlands or elsewhere, including Nasdaq. We do not comply with all best practice provisions of the DCGC. See “Description of Share Capital and Articles of Association.” This may affect your rights as a shareholder and you may not have the same level of protection as a shareholder in a Dutch company that fully complies with the DCGC.

We and our independent registered public accountants have identified a material weakness in our internal control over financial reporting. If we are unable to remediate the material weakness, or if other control deficiencies are identified, we may not be able to report our financial results accurately, prevent fraud or file our periodic reports as a public company in a timely manner.

Prior to this offering, we have been operating as a private company that was not required to comply with the obligations of a public company with respect to internal controls over financial reporting. We have historically operated with limited accounting personnel and other resources with which to address our internal controls over financial reporting.

In connection with the audit of our consolidated financial statements for the years ended December 31, 2018 and 2019, we and our independent registered public accountants identified a material weakness in our internal control over financial reporting. A “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness that was identified was primarily related to (a) a lack of sufficient accounting and supervisory personnel who have the appropriate level of technical accounting experience and training and (b) a lack of consistent application of accounting processes and procedures. These deficiencies constitute a material weakness in our internal controls over financial reporting in both design and operation. As a result of the material weakness, we failed to identify adjustments in various areas,

including but not limited to grants from government agencies and similar bodies and capitalization of tangible and intangible assets. Additionally, certain of our documentation was insufficient for assessment of critical accounting guidance for complex or judgmental areas, including share-based compensation. We have relied on the assistance of outside advisors with expertise in these matters to assist us in the preparation of our financial statements and in our compliance with SEC reporting obligations related to this offering and expect to continue to do so while we remediate this material weakness.

We have initiated a remediation plan to address this material weakness; however, our control environment can still be improved, and as a result, we may be exposed to errors. We plan to take additional steps to remediate the material weakness and improve our accounting function, including hiring of additional senior level and staff accountants to support the timely completion of financial close procedures, implement robust processes, and provide additional needed technical expertise, and in the interim, continuing to engage third parties as required to assist with technical accounting, application of new accounting standards, tax matters and valuations of equity instruments. Additionally, we intend to develop and implement consistent accounting policies, internal control procedures and provide additional training to our accounting and finance staff.

While we are working to remediate the weakness as quickly and efficiently as possible, we cannot at this time, provide an estimate of the timeframe we expect in connection with implementing our plan to remediate this material weakness. These remediation measures may be time consuming, costly, and might place significant demands on our financial and operational resources. If we are unable to successfully remediate this material weakness, or other material weaknesses occur in the future, or successfully supervise and rely on outside advisors with expertise in these matters to assist us in the preparation of our financial statements, our financial statements could contain material misstatements that, when discovered in the future, could cause us to fail to meet our future reporting obligations and cause the price of our shares to decline significantly.

As a result of becoming a public company, we will be obligated to develop and maintain proper and effective internal control over financial reporting in order to comply with Section 404 of the Sarbanes-Oxley Act. We may not complete our analysis of our internal control over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may adversely affect investor confidence in us and, as a result, the value of our common shares. In addition, because of our status as an emerging growth company, you will not be able to depend on any attestation from our independent registered public accountants as to our internal control over financial reporting for the foreseeable future.

When we become a public company following this initial public offering, we will be required by Section 404 of the Sarbanes-Oxley Act to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting in our second annual report following the completion of this offering. The process of designing and implementing internal control over financial reporting required to comply with this requirement will be time-consuming, costly and complicated. If during the evaluation and testing process we identify one or more other material weaknesses in our internal control over financial reporting or determine that existing material weaknesses have not been remediated, our management will be unable to assert that our internal control over financial reporting is effective. See “— Our independent registered public accountants have identified a material weakness in our internal control over financial reporting. If we are unable to remediate the material weakness, or if other control deficiencies are identified, we may not be able to report our financial results accurately, prevent fraud or file our periodic reports as a public company in a timely manner.” In addition, if we fail to achieve and maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act.

Even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm may issue a report that is qualified if it is not satisfied with our controls or the level at which our controls are documented, designed, operated or reviewed. However, our independent registered public accounting firm will not be required to attest formally to the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act until the later of the filing of our second annual report following the completion of this offering or the date we are no longer an “emerging growth company,” as defined in the JOBS Act. Accordingly, you will not be able

to depend on any attestation concerning our internal control over financial reporting from our independent registered public accountants for the foreseeable future.

We cannot be certain as to the timing of completion of our evaluation, testing and any remediation actions or the impact of the same on our operations. If we are not able to implement the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner or with adequate compliance, our independent registered public accounting firm may issue an adverse opinion due to ineffective internal controls over financial reporting, and we may be subject to sanctions or investigation by regulatory authorities, such as the SEC. As a result, there could be a negative reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. In addition, we may be required to incur costs in improving our internal control system and the hiring of additional personnel. Any such action could negatively affect our results of operations and cash flows.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains statements that constitute forward-looking statements. Many of the forward-looking statements contained in this prospectus can be identified by the use of forward-looking words such as “anticipate,” “believe,” “could,” “expect,” “should,” “plan,” “intend,” “estimate” and “potential,” or other similar expressions.

Forward-looking statements appear in a number of places in this prospectus and include, but are not limited to, statements regarding our intent, belief or current expectations. Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available to our management. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to, those identified under the section entitled “Risk Factors” in this prospectus. These risks and uncertainties include factors relating to:

- our ability to obtain funding for our operations necessary to complete further development and commercialization of our product candidates;
- the initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available and our research and development programs;
- the timing of and our ability to obtain and maintain regulatory approval for our product candidates;
- the ability and willingness of our third-party collaborators to continue research and development activities relating to our product candidates;
- the exercise by the Bill & Melinda Gates Foundation of withdrawal rights;
- our and our collaborators’ ability to obtain, maintain, defend and enforce our intellectual property protection for our proprietary and collaborative product candidates, and the scope of such protection;
- the rate and degree of market acceptance of our products;
- our ability to commercialize our product candidates, if approved;
- our ability and the potential to successfully manufacture our drug substances and delivery vehicles for preclinical use, for clinical trials and on a larger scale for commercial use, if approved;
- general economic, political, demographic and business conditions in the United States and Europe;
- fluctuations in inflation and exchange rates in Europe;
- our ability to implement our growth strategy;
- our ability to compete and conduct our business in the future;
- our ability to enroll patients for our clinical trials;
- the availability of qualified personnel and the ability to retain such personnel;
- regulatory developments and changes in the United States and foreign countries including tax matters;
- our use of proceeds from this offering and the concurrent private placement;
- our ability to overcome the challenges posed by the COVID-19 pandemic to the conduct of our business;
- other factors that may affect our financial condition, liquidity and results of operations; and
- other risk factors discussed under “Risk Factors.”

You should read this prospectus carefully with the understanding that our actual future results may be materially different from and worse than what we expect. If our forward-looking statements prove to be inaccurate, the inaccuracy may be material. Other sections of this prospectus include additional factors which could adversely impact our business and financial performance. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. Moreover, we operate in an evolving environment. Thus, new risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of our forward-looking statements by these cautionary statements.

Forward-looking statements speak only as of the date they are made, and we do not undertake any obligation to update them in light of new information or future developments or to release publicly any revisions to these statements in order to reflect later events or circumstances or to reflect the occurrence of unanticipated events or otherwise.

USE OF PROCEEDS

We estimate that the net proceeds to us from the offering will be approximately \$, assuming an initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses payable by us. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our net proceeds, assuming that the number of common shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and offering expenses, by \$ million. If the underwriters exercise in full their option to purchase additional shares, we estimate that the net proceeds from this offering will be approximately \$ million. In addition, we expect to receive €100 million in the concurrent private placement to Mr. Hopp.

We currently intend to use the net proceeds from this offering and the concurrent private placement, together with cash and cash equivalents on hand, as follows:

- approximately \$ million to advance our lead oncology program, CV8102, which is currently in a Phase 1 clinical trial through the completion of the Phase 2 clinical trial;
- approximately \$ million to advance our lead vaccine program, CV7202, which is currently in a Phase 1 clinical trial as a vaccine candidate for rabies through the completion of the Phase 2 clinical trial;
- approximately \$ million to fund clinical development of our mRNA vaccine program against SARS-CoV-2 that we are advancing in response to the global pandemic due to COVID-19 through the completion of the Phase 2 clinical trial;
- approximately \$ million to advance the development of our other preclinical and clinical programs;
- approximately \$ million to invest in further development of our mRNA technology platform;
- approximately \$ million to fund the expansion of our manufacturing capabilities; and
- the remainder for working capital and general corporate purposes.

Our expected use of net proceeds from this offering and the concurrent private placement represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering and the concurrent private placement or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of net proceeds will vary depending on numerous factors, including the timing and success of our current and future preclinical studies and clinical trials and the timing and outcome of regulatory submissions. As a result, our management will have broad discretion in the application of the net proceeds of this offering and the concurrent private placement, and investors will be relying on our judgment regarding the application of the net proceeds of this offering and the concurrent private placement.

Pending their use, we plan to invest the net proceeds of this offering and the concurrent private placement in short- and intermediate-term interest-bearing investments.

We believe that the anticipated net proceeds from this offering and the concurrent private placement, together with our existing cash, cash equivalents, borrowings available to us and short-term investments, will enable us to fund our operating expenses and capital expenditure requirements through . We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. The anticipated net proceeds from this offering and the concurrent private placement, together with our existing cash and cash equivalents, will not be sufficient for us to advance our product candidates through regulatory approval, and we will need to raise additional capital to complete the development and potential commercialization of our product candidates. In particular, we will need additional funds to advance our product candidates through Phase 3 clinical trials. We expect to finance our cash needs primarily through a combination of public or private equity offerings, strategic collaborations and debt financing. See “Management’s Discussion and Analysis of Financial Condition and Results of

Operations — Liquidity and Capital Resources — Contractual Obligations and Commitments — Future Capital Requirements” and “Risk Factors — Risks Related to Our Financial Position and Need for Additional Capital — We have incurred significant losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability” and “— Even if we consummate this offering, we will require substantial additional financing, which may not be available on acceptable terms, or at all. Raising additional capital may cause dilution to our shareholders, including purchasers of common shares in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.”

DIVIDEND POLICY

We have never paid or declared any cash dividends on our common shares, and we do not anticipate paying any cash dividends on our common shares in the foreseeable future. We intend to retain all available funds and any future earnings to fund the development and expansion of our business. As of the completion of our corporate reorganization, under Dutch law, we may only pay dividends to the extent our shareholders' equity (*eigen vermogen*) exceeds the sum of the paid-in and called-up share capital plus the reserves required to be maintained by Dutch law or by our articles of association and (if it concerns a distribution of profits) after adoption of the annual accounts by the general meeting from which it appears that such dividend distribution is allowed. Subject to such restrictions, any future determination to pay dividends will be at the discretion of our management board with the approval of our supervisory board and will depend upon a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our management board and supervisory board deem relevant.

Under our articles of association, our management board may decide that all or part of the profits are added to our reserves. Before reservation of any profit, to the extent that preferred shares have been cancelled and preferred distributions on those cancelled shares are outstanding, the profits are first to be used to satisfy the outstanding claim to those who held those preferred shares at the moment of such cancellation becoming effective and subsequently if any preferred shares are outstanding, a dividend is paid out of the remaining profit on the preferred shares in accordance with our articles of association. This dividend, or preferred dividend, shall be calculated on the basis of a fixed rate over the amount paid-up on the outstanding preferred shares pro rata tempore for the period during which they were outstanding during the financial year concerned, and shall include any arrears in payment of prior years' preferred dividends (if any). The remaining profit will be at the disposal of the general meeting at the proposal of the management board for distribution on the common shares, subject to restrictions of Dutch law and approval by our supervisory board of such proposal of our management board. Our management board is permitted, subject to certain requirements, to declare interim dividends without the approval of the general meeting, but only with the approval of the supervisory board. Dividends and other distributions shall be made payable not later than the date determined by the management board. Claims to dividends and other distributions not made within five years from the date that such dividends or distributions became payable will lapse and any such amounts will be considered to have been forfeited to us (*verjaring*).

CORPORATE REORGANIZATION

Introduction

CureVac B.V. is a Dutch private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) that was incorporated for the purpose of making this offering. Upon the incorporation of CureVac B.V., Mr. Franz-Werner Haas, our chief executive officer, became the sole director and the sole shareholder of CureVac B.V., holding one common share in the capital of CureVac B.V., the nominal value of which (in the amount of €0.12) has not been paid-in. CureVac B.V. has no assets, liabilities or contingent liabilities and will have no assets, liabilities or contingent liabilities until the completion of our corporate reorganization. As part of the corporate reorganization, all of the interests in CureVac AG will be exchanged for new common shares of CureVac B.V. to be issued to the existing security holders of CureVac AG in the course of such exchange in the course of a capital increase of CureVac B.V., and as a result, CureVac AG will become a wholly owned subsidiary of CureVac B.V., while the current shareholders of CureVac AG will become the shareholders of CureVac B.V. In connection with such exchange, the common share in CureVac B.V. held by Mr. Franz-Werner Haas will be cancelled (*ingetrokken*). Subsequently, CureVac B.V. will convert into a Dutch public company (*naamloze vennootschap*) and change its name to CureVac N.V. Therefore, investors in this offering will only acquire, and this prospectus only describes the offering of, common shares of CureVac N.V. We refer to the reorganization described above as our “corporate reorganization.”

The corporate reorganization will take place in several steps as described below.

Exchange of CureVac AG Securities for CureVac B.V. Common Shares

Immediately following the pricing of this offering, the existing shareholders of CureVac AG will each become a party to a separate notarial deed of issue under Dutch law, the existing shareholders will (i) subscribe for new common shares in CureVac B.V. and (ii) agree to transfer their respective shares in CureVac AG to CureVac B.V. as a contribution in kind against issuance of the aforementioned common shares in CureVac B.V. in the course of a capital increase of CureVac B.V. Immediately thereafter, the existing shareholders of CureVac AG will effect such transfer of their respective shares in CureVac AG to CureVac B.V. As a result of the issuance of common shares in CureVac B.V. to the shareholders of CureVac AG as consideration for the contribution and transfer of their respective shares in CureVac AG to CureVac B.V., CureVac B.V. will become the sole shareholder of CureVac AG.

Shares of CureVac B.V. to be Outstanding After the Corporate Reorganization

Shares of CureVac AG will be exchanged for common shares of CureVac B.V. on a -to- basis as provided for in each notarial deed of issue.

Upon completion of this share exchange (and prior to the closing of this offering), the current shareholders of CureVac AG will hold an aggregate of common shares of CureVac B.V.

Conversion of CureVac B.V. into CureVac N.V.

As part of the corporate reorganization, the legal form of CureVac B.V. will be converted from a Dutch private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) to a Dutch public company (*naamloze vennootschap*), and the articles of association of CureVac N.V. will become effective. Such final step will take place by means of the execution of a notarial deed of conversion and amendment, which will take place prior to the listing of our common shares on Nasdaq. This deed of conversion and amendment shall be executed following the delivery of a Dutch auditor’s statement confirming that, on a day within five months prior to the conversion, our shareholders’ equity was at least equal to the paid-in part of our issued share capital as set forth in the deed of conversion and amendment. The conversion will result in a name change from CureVac B.V. to CureVac N.V. Our articles of association, as they will read upon the closing of this offering, are further described in the section “Description of Share Capital and Articles of Association” and are filed (as an English translation of the official Dutch version) as an exhibit to the registration statement of which this prospectus forms a part.

CAPITALIZATION

The table below sets forth our cash and cash equivalents and capitalization (defined as long-term debt and shareholders' equity) as of March 31, 2020 derived from our unaudited consolidated financial statements prepared in accordance with IFRS as issued by the IASB:

- on an actual basis;
- on a pro forma basis to give effect to (i) the consummation of the 2020 Private Investment, (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million of our common shares at a price per share equal to the public offering price in this public offering, (iii) the repayment in full of the convertible loans entered into between us and Mr. Dietmar Hopp, or the Convertible Loans. See "Related Party Transactions — Convertible Loans with Mr. Hopp," or the Loans, (iv) our corporate reorganization; and
- on a pro forma as adjusted basis to give further effect to the issuance and sale of common shares in this offering, assuming an initial public offering price of \$ per common share, which is the midpoint of the price range set forth on the cover page of this prospectus.

This table should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Corporate Reorganization," "Certain Relationships and Related Party Transactions" and the consolidated financial statements and notes thereto appearing elsewhere in this prospectus.

	March 31, 2020		
	Actual	Pro Forma	Pro Forma As Adjusted ⁽¹⁾
	(in thousands of euros) (unaudited)		
Cash and cash equivalents	43,474	_____	_____
Convertible loans	67,078	_____	_____
Equity ⁽²⁾ :			
Issued capital	743	_____	_____
Capital reserve	495,327	_____	_____
Accumulated deficit	(539,797)	_____	_____
Other comprehensive income	70	_____	_____
Total shareholders' equity	(43,657)	_____	_____
Total capitalization	23,241	_____	_____

- (1) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by approximately \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase (decrease) of 1.0 million in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by approximately \$ million, assuming the assumed initial public offering price remains the same. The actual net proceeds payable to us will adjust based on the actual number of common shares sold by us, the actual public offering price and other terms of the offering determined at pricing. U.S. dollar amounts have been translated into euros at a rate of USD to €1.00, the official exchange rate quoted as of , 2020 by the Federal Reserve Bank of New York. Such U.S. dollar amounts are not necessarily indicative of the amounts of U.S. dollars that could actually have been purchased upon exchange of euros at the dates indicated.
- (2) Includes € equity component of outstanding Convertible Loans. On July 24, 2020, we terminated the Convertible Loans. We plan to repay the Convertible Loans prior to the consummation of this offering.

DILUTION

If you invest in our common shares in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share and the as adjusted net tangible book value per common share after this offering.

At March 31, 2020, we had a pro forma net tangible book value of \$ _____ million (€ _____ million), corresponding to a pro forma net tangible book value of \$ _____ per common share (€ _____ per common share). Pro forma net tangible book value represents the amount of our total assets less our total liabilities, excluding intangible assets, divided by _____, the number of common shares issued and outstanding, after giving effect to (i) the consummation of the 2020 Private Investment, (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million of our common shares at a price per share equal to the public offering price in this public offering, (iii) the repayment in full of the Convertible Loans with Mr. Dietmar Hopp and (iv) our corporate reorganization.

After giving further effect to the sale of the _____ common shares offered by us in the offering at an assumed initial public offering price of \$ _____ per common share (€ _____ per common share), which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value estimated at March 31, 2020 would have been approximately \$ _____ (€ _____), representing \$ _____ per common share (€ _____ per common share). This represents an immediate increase in pro forma net tangible book value of \$ _____ per common share (€ _____ per common share) to existing shareholders and an immediate dilution in net tangible book value of \$ _____ per common share (€ _____ per common share) to new investors purchasing common shares in this offering. Dilution for this purpose represents the difference between the price per common shares paid by these purchasers and net tangible book value per common share immediately after the completion of the offering.

The following table illustrates this dilution to new investors purchasing common shares in the offering.

	\$	€
Assumed initial public offering price per common share		
Pro forma net tangible book value per common share at March 31, 2020 after giving effect to (i) the consummation of the 2020 Private Investment, (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million of our common shares at a price per share equal to the public offering price in this public offering, (iii) the repayment in full of the Convertible Loans with Mr. Dietmar Hopp and (iv) our corporate reorganization		
Increase in net tangible book value per common share attributable to new investors		
Pro forma as adjusted net tangible book value per common share at March 31, 2020 after giving effect to the corporate reorganization and the offering		
Dilution per common share to new investors		
Percentage of dilution per common share to new investors		

Each \$1.00 increase (decrease) in the offering price per common share, respectively, would increase (decrease) the pro forma as adjusted net tangible book value after this offering by \$ _____ per common share (€ _____ per common share) and the dilution to new investors purchasing common shares in the offering by \$ _____ per common share (€ _____ per common share). Each increase (decrease) of 1.0 million in the number of shares we are offering would increase (decrease) the pro forma as adjusted net tangible book value after this offering by \$ _____ per common share (€ _____ per common share) and the dilution to new investors purchasing common shares in the offering by \$ _____ per common share (€ _____ per common share).

If the underwriters were to fully exercise their option to purchase additional shares, the pro forma as adjusted net tangible book value per common share after the offering would be \$ _____ per common share (€ _____ per common share), and the dilution per common share to new investors would be \$ _____ per common share (€ _____ per common share), in each case at the initial public offering price of \$ _____ per common share (€ _____ per common share).

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following tables present selected consolidated financial data for the years ended December 31, 2019 and 2018, and for the three months ended March 31, 2020 and 2019. We derived the selected consolidated statements of operations and comprehensive income (loss) data for the years ended December 31, 2019 and 2018 and the selected consolidated statement of financial position data as of December 31, 2019 from our audited consolidated financial statements included elsewhere in this prospectus. The selected consolidated statements of operations and comprehensive income (loss) data for the three months ended March 31, 2020 and 2019 and the selected consolidated statement of financial position data as of March 31, 2020 have been derived from our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited interim data reflects all adjustments necessary for a fair presentation of the financial information in those statements.

Our historical results for the three months ended March 31, 2019 and 2020 are not necessarily indicative of results to be expected for a full year or any other interim period. We maintain our books and records in euros, and we prepare our consolidated financial statements in accordance with IFRS as issued by the IASB.

This financial information should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements, including the notes thereto, included elsewhere in this prospectus.

CureVac B.V. is a newly formed holding company formed for the purpose of effecting the offering and has not engaged in any activities except those incidental to its formation, the corporate reorganization and the initial public offering of our common shares. CureVac B.V. has no assets, liabilities or contingent liabilities and will have no assets, liabilities or contingent liabilities until the completion of our corporate reorganization. Accordingly, summary financial information for CureVac B.V. is not presented. CureVac AG’s consolidated financial statements, including the notes thereto, are included elsewhere in this prospectus.

(in thousands of euros, except per share amounts)	For the Years Ended December 31,		For the Three Months Ended March 31,	
	2018	2019	2019	2020
	(unaudited)			
Statement of Operations and Comprehensive Income (Loss) Data:				
Revenue	12,871	17,416	3,156	3,119
Cost of sales	(17,744)	(27,983)	(7,558)	(5,475)
Selling and distribution expenses	(1,085)	(1,755)	(198)	(330)
Research and development expenses	(41,722)	(43,242)	(10,862)	(10,902)
General and administrative expenses	(25,289)	(48,969)	(6,887)	(11,495)
Other operating income	808	5,587	732	1,995
Other operating expenses	(663)	(552)	(108)	(127)
Operating loss	(72,824)	(99,498)	(21,725)	(23,216)
Finance income	1,968	833	649	1,041
Finance expenses	(275)	(1,460)	(90)	(1,719)
Loss before income tax	(71,131)	(100,125)	(21,166)	(23,894)
Income tax benefit (expense)	(110)	252	(142)	44
Net loss for the year	(71,241)	(99,873)	(21,308)	(23,850)
Other comprehensive income/loss:				
<i>Items that may be subsequently reclassified to profit or loss</i>				
Foreign currency adjustments	66	32	36	48
Total comprehensive loss for the year	(71,175)	(99,841)	(21,272)	(23,802)
Net loss per share (basic and diluted)	(98.05)	(137.45)	(29.32)	(32.48)

	As of December 31,		As of March 31,
	2018	2019	2020
(in thousands of euros)			(unaudited)
Statement of Financial Position Data:			
Cash and cash equivalents	21,380	30,684	43,474
Total assets	125,659	130,620	155,656
Total liabilities	93,576	173,422	199,313
Total equity	32,083	(42,802)	(43,657)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with CureVac AG's audited consolidated financial statements as of and for the years ended December 31, 2018 and 2019 and the notes thereto, included elsewhere in this prospectus, as well as the information presented under "Selected Consolidated Financial Information." The following discussion is based on our financial information prepared in accordance with IFRS as issued by the IASB, which may differ in material respects from generally accepted accounting principles in the United States and other jurisdictions. The following discussion includes forward looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward looking statements as a result of many factors, including but not limited to those described under "Risk Factors" and elsewhere in this prospectus.

On April 7, 2020, CureVac B.V. was incorporated under the laws of the Netherlands to become the holding company for CureVac AG in connection with this offering pursuant to the corporate reorganization. See "Corporate Reorganization." CureVac B.V. has not engaged in any activities except those incidental to its formation, the corporate reorganization and the initial public offering of our common shares. CureVac B.V. has no assets, liabilities or contingent liabilities and will have no assets, liabilities or contingent liabilities until the completion of our corporate reorganization. Accordingly, financial information for CureVac B.V. and a discussion and analysis of its results of operations and financial condition for the period of its operations prior to the corporate reorganization would not be meaningful and are not presented. Following the corporate reorganization, CureVac N.V. will become the holding company of CureVac AG and the historical consolidated financial statements of CureVac AG included in this Registration Statement will become part of the historical consolidated financial statements of CureVac N.V.

Overview

We are a global clinical-stage biopharmaceutical company developing a new class of transformative medicines based on messenger ribonucleic acid that has the potential to improve the lives of people. Our vision is to revolutionize medicine and open new avenues for developing therapies by enabling the body to make its own drugs. Messenger ribonucleic acid, or mRNA, plays a central role in cellular biology in the production of proteins in every living cell. We are the pioneers in successfully harnessing mRNAs designed to prevent infections and to treat diseases by mimicking human biology to synthesize the desired proteins. Our technology platform is based on a natural approach to optimize mRNA constructs that encode functional proteins that replace defective or missing proteins using the cell's intrinsic translation machinery. Our current product portfolio includes clinical and preclinical candidates across multiple disease indications in oncology, prophylactic vaccines and protein therapy. Our lead clinical programs are CV8102, which we are evaluating in a Phase 1 clinical trial for the treatment of four types of solid tumors, and CV7202, which we are currently investigating in a Phase 1 clinical trial for potential vaccination against rabies. We are also rapidly advancing our mRNA vaccine program against coronavirus (SARS-CoV-2), for which we initiated a Phase 1 clinical trial in healthy volunteers in June 2020, with results expected in the fourth quarter of 2020.

As of March 31, 2020, we had cash and cash equivalents amounting to €43.5 million. We have incurred significant losses since our inception. Our consolidated net loss for the three months ended March 31, 2020 was €23.9 million and for the year ended December 31, 2019 was €99.9 million. As of March 31, 2020, our accumulated deficit was €539.8 million. We expect to continue to incur losses in the future as we continue our research and development of, and seek regulatory approvals for, our product candidates and maintain and develop new technology platforms, prepare for and begin to commercialize any approved product candidates and add infrastructure and personnel to support our product development efforts and operations as a public company in the United States. We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and clinical trials and development of our manufacturing technology and we anticipate that our expenses will continue to increase over the next several years as we continue these activities. We believe that we will continue to expend substantial resources for the foreseeable future developing our proprietary product candidates. These expenditures will include costs associated with research and development, conducting preclinical studies and clinical trials, seeking regulatory approvals, as well as launching and commercializing products approved for sale, if any, costs associated with manufacturing products and maintaining manufacturing facilities. In addition, other

unanticipated costs may arise. Because the outcomes of our anticipated clinical trials are highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our proprietary product candidates.

Upon the outbreak of the COVID-19 pandemic, we determined to make the development of a vaccine candidate against COVID-19 a priority and to use our large scale GMP III facility to provide required material for a potential vaccine product candidate. While there is currently no larger production batch required for our other product candidates, this prioritization could impact clinical development of our other product candidates if such a production need arises. Our research personnel dedicated to infectious diseases focused its efforts on optimizing vaccine constructs in preparation of a Phase 1 clinical trial, and this focus may delay development of other potential infectious disease product candidates. We also postponed initially planned preclinical work on an influenza vaccine to later in 2020. We can provide no assurances that our focus on clinical development of a vaccine candidate against COVID-19 will not adversely impact clinical development of our other product candidates.

In addition, our operating plan may change as a result of many factors currently unknown to us. As a result of these factors, we may need additional funds sooner than planned. We expect to finance future cash needs primarily through a combination of public or private equity offerings, strategic collaborations and debt financing. If sufficient funds on acceptable terms are not available when needed, or at all, we could be forced to significantly reduce operating expenses and delay, limit, reduce or terminate one or more of our product development programs or commercialization efforts, which would have a negative impact on our business, prospects, operating results and financial condition.

Key Factors Affecting Our Results of Operations

We believe that the most significant factors affecting our results of operations include:

Research and Development Expenses

Our ability to successfully pioneer a robust mRNA technology platform and develop innovative product candidates will be the primary factor affecting our future growth and development. Our approach to the discovery and development of product candidates based on mRNA technology is still being demonstrated. As such, we do not know whether we will be able to successfully develop any products. Developing novel product candidates requires a significant investment of resources over a prolonged period of time, and a core part of our strategy is to continue making sustained investments in this area. We have chosen to leverage our platform to initially focus on advancing our product candidates in the areas of oncology, infectious diseases and protein delivery.

For more information on our proprietary technology and clinical development pipeline, see “Business — Our Product Portfolio.”

All of the product candidates are still in development, and we have incurred and will continue to incur significant research and development costs for preclinical studies and clinical trials. We expect that our research and development expenses will constitute the most substantial part of our expenses in future periods in line with the advance and expansion of the development of our product candidates.

We have historically been able to fund the research and development expenses primarily through private placements of equity securities, convertible loans, grants from government agencies and similar bodies and payments for collaborative research and development services with strategic partners.

The net proceeds to us from this offering will also be an important source of funds for our research and development. For more information on the nature of the intended uses for the proceeds from this offering, see “Use of Proceeds.”

Our and Our Collaborators’ Ability to Commercialize Our Product Candidates

Our ability to generate revenue from our product candidates depends on our and our collaborators’ ability to successfully complete clinical trials for our product candidates and receive regulatory approval, particularly in the United States, Europe, and other major markets.

We believe that our broad portfolio of product candidates with both novel and validated targets enhances the likelihood that our research and development efforts will yield successful product candidates. Nonetheless, we cannot be certain if any of our product candidates will receive regulatory approvals. Even if such approvals are granted, we will thereafter need to maintain manufacturing and supply arrangements and engage in extensive marketing prior to generating any revenue from such products, and the ultimate commercial success of our products will depend on their acceptance by patients, the medical community and third-party payors and their ability to compete effectively with other therapies on the market. See “Risk Factors — Risks Related to the Development, Clinical Testing and Commercialization of Our Product Candidates.”

The competitive environment is also an important factor with the commercial success of our product candidates, and our ability to successfully commercialize a product candidate will depend on whether there are competing product candidates being developed or already marketed by other companies.

Our Collaborations and Related License Agreements

Our results of operations have been, and we expect them to continue to be, affected by our collaborations with third parties for the development and commercialization of certain of our product candidates. To date, our revenues have been recognized pursuant to license and collaboration agreements, which include upfront payments for licenses or options to obtain licenses, milestone payments, payments for product sales and payments for research and development services. Grants from government agencies or similar bodies are recognized as other operating income or as a reduction to depreciation and amortization expense recognized from assets purchased under the associated arrangements.

We have entered into strategic collaborations and license agreements with third parties. As part of our business development strategy, we aim to increase the number of our strategic collaborations in order to derive further value from our platform and more fully exploit their potential.

Certain key terms of our current material collaboration and license agreements are summarized below. For further details on our collaboration agreements, see “Business — Collaborations.”

GlaxoSmithKline

In July 2020, we entered into a Collaboration and License Agreement with GSK, which we refer to as the GSK Agreement, pursuant to which we will collaborate with GSK to research, develop and commercialize prophylactic and therapeutic non-replicating mRNA-based vaccines and antibodies targeting infectious disease pathogens.

GSK is required to pay us an upfront payment of €120 million and a manufacturing capacity reservation fee of €30 million following a certain regulatory milestone event, which is creditable against future milestone payments. We are eligible to receive up to between €28 million to €45 million in development milestone payments, €32 million to €35 million in regulatory milestone payments and €70 million to €100 million in commercial milestone payments, depending on the product. Under the GSK Agreement, we granted GSK an exclusive option to add additional products in the field of infectious diseases to the license granted under the GSK Agreement and upon each exercise of such option, GSK is required to compensate us for certain development costs and pay any accrued milestone payments. GSK additionally has the right to replace products licensed under the GSK Agreement and if the replacement product was already under development by us, GSK must compensate us for certain development costs and pay any accrued milestone payments. We are additionally eligible to receive tiered royalty payments ranging from a single-digit percentage to a low teens percentage on net sales, subject to certain customary reductions. GSK is required to compensate us for certain development and regulatory costs we may incur in connection with our performance of our obligations under the GSK Agreement and we are eligible to receive up to €20,000 in reimbursements for expenses incurred recording or registering the licenses granted under the GSK Agreement. We retain the right to commercialize products developed under the GSK Agreement in Germany, Austria and Switzerland, as GSK’s exclusive distributor in these markets. Under any such distribution agreement to be entered into between us and GSK, we will be required to purchase supply from GSK and pay GSK a low thirties percentage royalty on net sales. As of the effective date of the GSK Agreement, we have not received any payments under the GSK Agreement.

Genmab

In December 2019, we entered into a Collaboration and License Agreement, which we refer to as the Genmab Agreement, with Genmab to research and develop up to four potential differentiated mRNA-based antibody products, to be selected by Genmab, based on the combination of our proprietary RNAntibody technology with Genmab's proprietary antibody technology for the treatment of human diseases. We will collaborate on research to identify an initial product candidate designed to express a certain Genmab proprietary antibody and we will contribute a portion of the overall costs for the development of such product candidate, until submission of an IND. Genmab will thereafter be responsible for the development and commercialization of the product candidate. Under the Genmab Agreement we further grant Genmab a license for the preclinical development of up to four additional mRNA antibody product concepts and options to obtain commercial licenses under our mRNA technology to develop, manufacture and commercialize product candidates for up to three of such product concepts.

Under the terms of the Genmab Agreement, Genmab agreed to pay us a \$10 million upfront fee and made a €20 million equity investment in March 2020. Genmab will be obligated to pay us a \$0.5 million reservation fee upon the selection of each additional product concept for development under the Genmab Agreement and \$5 million upon selection of a product targeting Genmab's proprietary antibody for further development and commercialization. Genmab is additionally required to pay us up to \$30 million in option exercise fees. If Genmab exercises any of its options to obtain commercial licenses for the additional mRNA antibody concepts, Genmab would fund all research and would develop and commercialize any resulting product candidates. We are additionally eligible to receive up to between \$25 million and \$43 million in development milestone payments, \$100 million and \$125 million in regulatory milestone payments and \$150 million and \$200 million in commercial milestone payments for each product, depending on the specific product concept. In addition, we are eligible to receive a mid single-digit to low teens percentage tiered royalty on aggregate net sales of licensed products, on a per-product basis and subject to certain customary reductions. If Genmab grants a sublicense to the initial product candidate developed under the Genmab Agreement before a certain milestone event, Genmab must pay us a one-time \$10 million payment. We are responsible for any payments to third parties related to the LNP technology we license to Genmab for use in relation to the initial product candidate developed under the Genmab Agreement and a portion of such payments with respect to LNP technology used in the additional product concepts. We retain an option to participate in development and commercialization of one of the potential additional mRNA antibody product concepts under predefined terms and conditions. In the event we exercise such right, we must pay Genmab a one-time payment of \$3 million and refund any option fee paid by Genmab with respect to such product. As of May 31, 2020, we have received approximately \$0.1 million in development cost reimbursements and we have not received any reservation, product selection, option exercise or sublicense fees or milestone or royalty payments.

Arcturus

In January 2018, we entered into a Development and Option Agreement, which we refer to as the Arcturus Agreement, with Arcturus, which provides us with access to Arcturus LNP formulation technology which we use in combination with our mRNA technology. We agreed to pay Arcturus an upfront fee of \$5 million and must pay an extension fee of \$1 million if we exercise our option to extend the initial term of the Arcturus Agreement beyond July 2023. We are required to reimburse Arcturus for certain costs incurred in connection with development activities and provide certain FTE funding. We are additionally required to pay up to an aggregate of \$5 million in connection with our acceptance of the irrevocable offer to obtain licenses for further development and commercialization of selected targets. Under each license agreement to be entered into in connection with our acceptance of the irrevocable offer, we will additionally be required to make certain royalty payments, which are not in excess of 10% on net sales of licensed products, and pay Arcturus up to \$6 million in development milestone payments, \$9 million in regulatory milestone payments and \$8 million in commercial milestone payments. As of May 31, 2020, we have made payments totaling approximately \$5.3 million to Arcturus reimbursing Arcturus for development costs and in connection with our FTE funding obligations, and we have not accepted the irrevocable offer with respect to any target and therefore have not paid any acceptance fees or made any milestone or royalty payments to Arcturus.

Acuitas

In April 2016, we entered into a Development and Option Agreement, which we refer to as the Acuitas Agreement, with Acuitas, which provides us with access to Acuitas LNP formulation technology that we use in combination with our mRNA technology. We are required to pay Acuitas annual target reservation and maintenance fees of up to approximately \$1.1 million if we reserve the maximum number of targets permitted under the Acuitas Agreement and to reimburse Acuitas for certain costs incurred in connection with development activities and certain FTE costs. We are additionally required to pay an option exercise fee ranging from \$50,000 to \$300,000 upon each exercise of our option to obtain a license for further development and commercialization with respect to a selected target, subject to certain additional fees ranging from \$10,000 to \$40,000 for the exercise of our option for certain other vaccine targets. We are required to pay Acuitas a \$5 million upfront fee in connection with an amendment to the Acuitas Agreement dated July 2020 and, upon each exercise of our option to exchange a vaccine target licensed under any non-exclusive license, we are required to pay an exchange fee of \$3 million. Under each license agreement in connection with our exercise of our option, we will additionally be required to make low single-digit percentage tiered royalty payments and must pay up to between approximately \$1.1 million and \$2.9 million in development milestone payments, \$1.3 million and \$2.6 million in regulatory milestone payments and \$1.3 million and \$2.6 million in commercial milestone payments, depending on whether the license is exclusive or non-exclusive and the number of options exercised to date. As of May 31, 2020 we have exercised our option to obtain a non-exclusive license to nine targets. We have also provided notice to Acuitas of our exercise of our option to obtain a non-exclusive license to four additional targets and we expect to enter into non-exclusive licenses with respect to such targets. As of May 31, 2020, we have paid Acuitas approximately \$2.3 million in reservation and option exercise fees and have made payments totaling approximately \$5.1 million reimbursing Acuitas for development costs and LNP batches and in connection with our FTE funding obligations.

For each option that we have exercised under the Acuitas Agreement, we have entered into a non-exclusive license agreement with Acuitas with respect to such optioned target, all based on the same form agreement, which we refer to as the Acuitas License Agreements. We are required to pay Acuitas up to between approximately \$1.1 million and \$1.6 million in development milestone payments, \$1.3 million and \$1.8 million in regulatory milestone payments and \$1.3 million and \$1.8 million in commercial milestone payments under each Acuitas License Agreement and we must pay Acuitas annual fees ranging from \$5,000 to \$10,000 for any additional protein targeted by a vaccine product licensed under each Acuitas License Agreement after a certain milestone event. We additionally are obligated to pay Acuitas a low single-digit percentage royalty on net sales of licensed products. As of May 31, 2020, we have made \$100,000 in development milestone payments to Acuitas with respect to the license agreement relating to Rabies RAV-G and have not made any royalty payments.

CRISPR Therapeutics

In November 2017, we entered into a Development and License Agreement, which we refer to as the CRISPR Therapeutics Agreement, with CRISPR Therapeutics, pursuant to which we will develop novel Cas9 mRNA constructs for use in gene editing therapeutics. Under the CRISPR Therapeutics Agreement, we granted CRISPR Therapeutics an exclusive worldwide license to use our improved Cas9 constructs for the development and commercialization of three of its *in vivo* gene-editing programs for certain diseases.

CRISPR Therapeutics was required to pay us an upfront one-time technology access fee of \$3 million and we are eligible to receive up to \$13 million in development milestone payments, \$33 million in regulatory milestone payments and \$133 million in commercial milestone payments, as well as mid single-digit percentage royalties from CRISPR Therapeutics on the net sales of licensed products on a product-by-product and country-by-country basis, subject to certain potential customary reductions. Additionally, CRISPR Therapeutics will make payments to us for services provided by us in conjunction with research programs under the CRISPR Therapeutics Agreement. In the event CRISPR Therapeutics exercises its right to sublicense under the agreement, CRISPR Therapeutics must pay us a low teens to mid-twenties percentage of any non-royalty sublicense income, depending on the timing of the sublicense and whether the sublicense is granted through an affiliate of CRISPR Therapeutics. As of May 31, 2020, we have received approximately €0.5 million in payments for the supply of materials and FTE cost and development reimbursements and no milestone, royalty or sublicense fee payments.

Boehringer Ingelheim

In August 2014, we entered into an Exclusive Collaboration and License Agreement, which we refer to as the *Boehringer Agreement*, with *Boehringer Ingelheim*, whereby we granted *Boehringer Ingelheim* exclusive global rights for development and commercialization of our investigational therapeutic mRNA vaccine BI 1361849 (former CV9202).

We received an upfront payment of €30 million, as well as, an option fee payment of €5 million and an additional €7 million in development milestone payments. We are eligible to receive up to an additional €73 million in development milestone payments, €250 million in regulatory milestone payments and €100 million in commercial milestone payments, as well as royalties in the low teens on net sales of licensed products. We are responsible for any payment obligations arising under certain existing third-party license agreements and costs we incur in relation to the research and development of BI 1361849 (former CV9202) manufacturing technology. *Boehringer Ingelheim* is responsible for all other development and commercialization costs and is required to reimburse us for any such costs we may incur. As of May 31, 2020, *Boehringer Ingelheim* has made payments to us for a net amount of approximately €7.4 million for the supply of materials and reimbursing us for development costs. We have received no royalty payments.

Bill & Melinda Gates Foundation

In May 2014, we were awarded a grant from the *Bill & Melinda Gates Foundation* for the development of a vaccine for rotaviruses for up to approximately \$2.5 million. As of May 31, 2020, we have received approximately \$2.0 million in funding under the agreement. In March 2015, the *Bill & Melinda Gates Foundation* made an equity investment of \$40 million to support continued development of our RNA technology platform and the construction of an industrial scale cGMP production facility. We entered into a *Global Access Commitments Agreement* with the *Bill & Melinda Gates Foundation* in February 2015 pursuant to which we are required to take certain actions to support the *Bill & Melinda Gates Foundation* mission. In connection with the investment by the *Bill & Melinda Gates Foundation*, we are required to conduct development activities for up to three concurrent projects to be proposed by the *Bill & Melinda Gates Foundation*. The costs of such projects will be allocated on a project-by-project basis in proportion to the allocation of the expected benefits.

In November 2016, in connection with the *Global Access Commitments Agreement*, we were awarded a grant for up to approximately \$0.9 million in funding from the *Bill & Melinda Gates Foundation* for the development of a vaccine for picornaviruses. As of May 31, 2020, we have received approximately \$0.7 million in funding under the picornaviruses grant agreement. In November 2017, we were awarded two additional grants each for up to approximately \$1.9 million and \$1.5 million in funding from the *Bill & Melinda Gates Foundation* for the development of a universal influenza and a malaria vaccine respectively. As of May 31, 2020, we have received approximately \$1.5 million and \$0.8 million respectively in funding under each grant agreement.

Coalition for Epidemic Preparedness Innovations

In February 2019, we entered into a framework partnership agreement, which we refer to as the *CEPI Agreement*, with *CEPI*, to develop our RNA Printer using certain intellectual property controlled by us covering the development and manufacture of mRNA products, as well as certain additional intellectual property licensed to us. In connection with the *CEPI Agreement* we have entered into work orders for the preclinical development of a Lassa virus vaccine, a yellow fever vaccine and our rabies virus vaccine. In addition, we entered into a work package for the preclinical development and a Phase 1 clinical trial for a SARS-CoV-2 vaccine. *CEPI* agreed to contribute up to approximately \$34 million in funding for projects undertaken under the *CEPI Agreement* and an additional \$15.3 million in connection with development of the SARS-CoV-2 vaccine. As of May 31, 2020, we have received approximately €20.5 million in funding for projects undertaken under the *CEPI Agreement*.

Tesla Grohmann

In November 2015, we entered into a development and intellectual property agreement, which we refer to as the *Tesla Grohmann Agreement*, with *Tesla Grohmann*, pursuant to which *Tesla Grohmann*

agreed to design, develop and manufacture certain automated manufacturing machines on our behalf. We are obligated to pay Tesla Grohmann a fee for each machine delivered by Tesla Grohmann and up to \$50 million to \$60 million in commercial milestone payments as well as certain development costs under each associated work order. As of May 31, 2020 we have paid Tesla Grohmann approximately €5 million to €6 million in development costs under various work orders and we have not paid any fees for machines provided under the Tesla Grohmann Agreement or made any milestone payments.

Eli Lilly License and Collaboration Agreement

In November 2017, we entered into a global immuno-oncology collaboration with Eli Lilly focused on the development and commercialization of cancer vaccine products based on our proprietary RActive[®] technology, which we refer to as the Eli Lilly Agreement. In 2017, we received an upfront payment of \$50 million and an equity investment of €45 million and as of May 31, 2020, we have received approximately €14.6 million in payments for the supply of materials and reimbursements for development costs. In June 2020 we entered into a termination agreement with Eli Lilly, which we refer to as the Eli Lilly Termination Agreement, and all licenses, and Eli Lilly's payment obligations, under the Eli Lilly Agreement terminated.

Financial Operations Overview

Revenue

To date, our revenues have consisted of upfront licensing payments, product sales and compensation for research and development services, all of which relate to our license and collaboration agreements. Certain of these payments are initially recorded on our statement of financial position and are subsequently recognized as revenue in accordance with our accounting policy as described further in "Critical Accounting Policies and Estimates" and note 2 to our consolidated financial statements included elsewhere in this prospectus.

Cost of sales

Cost of sales consists primarily of personnel costs, costs for materials and third-party services, as well as maintenance and lease costs (for 2018), and depreciation and amortization. Costs of sales includes costs of product sales, idle production costs and costs from set-up and quality assurance activities for our production processes, including those relating to pharmaceutical products which are under development in our collaboration agreements and for which we have not yet generated revenues.

Selling and distribution expenses

Selling and distribution expenses primarily consist of personnel expenses which include salary and salary related expenses and expenses from share-based compensation.

Research and development expenses

Research and development expenses consist primarily of costs incurred for our research and preclinical and clinical development activities, including our product discovery efforts and certain activities relating to the design of GMP-manufacturing facilities. Research and development expenses contain wages and salaries, share-based compensation, fringe benefits and other personnel costs, the costs of clinical testing and the associated clinical production costs, research material production costs, fees for contractual partners, consultants and other third parties, fees to register legal rights, amortization of licensed software and intellectual property as well as costs for plant and facilities. Research and development expenses contain costs for independent research and development work as well as work carried out in the context of collaboration and licensing agreements; such expenses include all costs related to research and development services delivered under our collaboration arrangements.

We also have partnered programs as further described under "Business — Collaborations," for which we incur additional expenses. In addition, our research and development expenses relate to our preclinical studies of further product candidates and discovery activities. These expenses mainly consist of

salaries, share based-compensation, costs for production of preclinical compounds and costs paid to contract research organizations.

We expense research and development expenses as incurred. We recognize costs for certain development activities, such as preclinical studies and clinical trials, based on an evaluation of the progress to completion of specific tasks. We use information provided to us by our vendors such as patient enrollment or clinical site activations for services received and efforts expended. We expect research and development costs, including manufacturing to support these activities, to increase significantly for the foreseeable future as our current development programs progress and new programs are added.

General and administrative expenses

General and administrative expenses generally include wages and salaries, share-based compensation, fringe benefits and other personnel costs of our senior management and administrative personnel, costs for professional services, including legal, audit and consulting services and costs of facilities and office expenses. We expect that our general and administrative costs will increase as a result of a greater level of support for our increasing research and development activities, potential commercialization of our product candidates and costs associated with being a public company in the United States.

Results of Operations

Comparison of the Three Months Ended March 31, 2019 and 2020

The following table summarizes our results of operations for the three months ended March 31, 2019 and 2020:

(in thousands of EUR, except per share data)	For the Three Months Ended March 31,	
	2019	2020
	(unaudited)	
Statement of Operations and Comprehensive Income (Loss) Data:		
Revenue	3,156	3,119
Cost of sales	(7,558)	(5,475)
Selling and distribution expenses	(198)	(330)
Research and development expenses	(10,862)	(10,902)
General and administrative expenses	(6,887)	(11,495)
Other operating income	732	1,995
Other operating expenses	(108)	(127)
Operating loss	(21,725)	(23,216)
Finance income	649	1,041
Finance expenses	(90)	(1,719)
Loss before income tax	(21,166)	(23,894)
Income tax benefit (expense)	(142)	44
Net loss for the year	(21,308)	(23,850)
Other comprehensive income/loss:		
<i>Items that may be subsequently reclassified to profit or loss</i>		
Foreign currency adjustments	36	48
Total comprehensive loss for the year	(21,272)	(23,802)
Net loss per share (basic and diluted)	(29.32)	(32.48)

Revenue

Revenue was €3.1 million for the three months ended March 31, 2020, representing a decrease of €0.1 million, or 1%, from €3.2 million for the three months ended March 31, 2019. The decrease was

primarily attributable to less revenue recognized from the collaboration with Eli Lilly and Company, or Eli Lilly, in the three months ended March 31, 2020, partially offset by revenues recognized from the new collaboration with Genmab during this period.

Cost of sales

Cost of sales was €5.5 million for the three months ended March 31, 2020, representing a decrease of €2.1 million, or 28%, from €7.6 million for three months ended March 31, 2019. The decrease was primarily attributable to decreases in material expenses as well as third-party services of €1.4 million and €0.8 million, respectively, in the three months ended March 31, 2020 as compared to in the three months ended March 31, 2019. The decrease in materials expenses was primarily due to the inventory write-downs of €1.5 million in the three months ended March 31, 2019, whereas none were recognized in the three months ended March 31, 2020. The decrease in third-party expenses was primarily due to lower set-up and quality assurance activities for our production processes in the three months ended March 31, 2020 as compared to in the three months ended March 31, 2019.

	For the Three Months Ended March 31,	
	2019	2020
	(in thousands of euros) (unaudited)	
Personnel	(2,488)	(2,821)
Materials	(2,928)	(1,550)
Third-party services	(1,489)	(675)
Maintenance and lease	(206)	(159)
Amortization and depreciation	(401)	(246)
Other	(46)	(24)
Total	<u>(7,558)</u>	<u>(5,475)</u>

Selling and distribution expenses

Selling and distribution expenses were €0.3 million for the three months ended March 31, 2020, representing an increase of €0.1 million, or 67%, from €0.2 million in the three months ended March 31, 2019. The increase was primarily attributable to higher personnel expenses resulting from expense recognized on share-based payment awards made subsequent to the three months ended March 31, 2019.

	For the Three Months Ended March 31,	
	2019	2020
	(in thousands of euros) (unaudited)	
Personnel	(79)	(240)
Maintenance and lease costs	(88)	—
Amortization and depreciation	(19)	(41)
Other	(12)	(49)
Total	<u>(198)</u>	<u>(330)</u>

Research and development expenses

Research and development costs were €10.9 million for the three months ended March 31, 2020, unchanged from €10.9 million in the three months ended March 31, 2019.

	For the Three Months Ended March 31,	
	2019	2020
	(in thousands of euros) (unaudited)	
Materials	(963)	(1,165)
Personnel	(3,251)	(3,686)
Amortization and depreciation	(129)	(351)
Patents and fees to register a legal right	(1,202)	(823)
Third-party services	(5,094)	(4,263)
Maintenance and lease	(111)	(454)
Other	(112)	(160)
Total	<u>(10,862)</u>	<u>(10,902)</u>

The following table reflects our research and development costs for each of our programs for the three months ended March 31, 2019 and 2020:

	For the Three Months Ended March 31,	
	2019	2020
	(in thousands of euros) (unaudited)	
Key Programs (CV8102, CV7202 and SARS-CoV-2)		
CV8102	1,125	1,425
CV7202	527	898
SARS-CoV-2	—	396
Other Research and Development Programs	3,535	2,836
Unallocated costs ⁽¹⁾	5,675	5,347
Total	<u>10,862</u>	<u>10,902</u>

(1) Unallocated costs primarily consist of costs associated with personnel expenses, patents and fees to register a legal right, amortization and depreciation, maintenance and lease expenses, certain third party service expenses and certain material expenses.

General and administrative expenses

General and administrative expenses were €11.5 million for the three months ended March 31, 2020, representing an increase of €4.6 million, or 67%, from €6.9 million in the three months ended March 31, 2019. The increase was primarily attributable to increased personnel expenses resulting from share-based compensation which included a €2.6 million expense recorded for the immediate vesting of

certain unvested options awarded to our former CEO and for severance costs. Refer to Note 5 of the unaudited interim condensed consolidated financial statements and notes for additional information regarding this event.

	For the Three Months Ended March 31,	
	2019	2020
	(in thousands of euros) (unaudited)	
Personnel	(3,936)	(7,055)
Maintenance and lease costs	(990)	(1,333)
Third-party services	(571)	(1,420)
Legal and other professional services	(154)	(427)
Amortization and depreciation	(426)	(418)
Other	(810)	(842)
Total	<u>(6,887)</u>	<u>(11,495)</u>

Other operating income

Other operating income was €2.0 million in the three months ended March 31, 2020, representing an increase of €1.3 million, from €0.7 million for the three months ended March 31, 2019. The increase was due to an increase in amounts recognized from grants from government agencies and similar bodies, primarily CEPI.

Other operating expense

Other operating expense was €0.1 million for the three months ended March 31, 2020 from €0.1 million for the three months ended March 31, 2019. Other operating expense related primarily to compensation expense for our supervisory board in both periods.

Finance income

Finance income was €1.0 million for the three months ended March 31, 2020, representing an increase of €0.4 million, or 60%, from €0.6 million for the three months ended March 31, 2019. The increase was mainly attributable to higher unrealized foreign exchange gains.

Finance expenses

Finance expenses were €1.7 million for the three months ended March 31, 2020, representing an increase of €1.6 million, or 1810%, from €0.1 million for the three months ended March 31, 2019. The increase was related to interest on convertible loans incurred by us.

Income tax benefit (expense)

An income tax benefit of €0.04 million was generated for the three months ended March 31, 2020 compared to an income tax expense of €0.1 million for the three months ended March 31, 2019 as a result of higher deferred tax benefit recognized on taxable temporary differences.

Year Ended December 31, 2018 Compared to Year Ended December 31, 2019

We have based the following discussion of our financial condition and results of operations on our audited consolidated financial statements as of and for the years ended December 31, 2018 and 2019 and the notes thereto, included elsewhere in this prospectus, as well as the information presented under “Selected Financial Information.”

The following is a discussion of our consolidated results of operations for each of the years ended December 31, 2018 and December 31, 2019. This information is derived from our accompanying consolidated financial statements prepared in accordance with IFRS as issued by IASB.

The following table summarizes our results of operations for the years ended December 31, 2018 and 2019:

(in thousands of EUR, except per share data)	For the Years Ended December 31,	
	2018	2019
Statement of Operations and Comprehensive Income (Loss) Data:		
Revenue	12,871	17,416
Cost of sales	(17,744)	(27,983)
Selling and distribution expenses	(1,085)	(1,755)
Research and development expenses	(41,722)	(43,242)
General and administrative expenses	(25,289)	(48,969)
Other operating income	808	5,587
Other operating expenses	(663)	(552)
Operating loss	(72,824)	(99,498)
Finance income	1,968	833
Finance expenses	(275)	(1,460)
Loss before income tax	(71,131)	(100,125)
Income tax benefit (expense)	(110)	252
Net loss for the year	(71,241)	(99,873)
Other comprehensive income/loss:		
<i>Items that may be subsequently reclassified to profit or loss</i>		
Foreign currency adjustments	66	32
Total comprehensive loss for the year	(71,175)	(99,841)
Net loss per share (basic and diluted)	(98.05)	(137.45)

Revenue

Revenue was €17.4 million for 2019, representing an increase of €4.5 million, or 35%, from €12.9 million for 2018. The increase was primarily attributable to an increase of €2.7 million in research and development services and an increase of €1.9 million from product sales in 2019 under our collaboration agreements.

Cost of sales

Cost of sales was €28.0 million for 2019, representing an increase of €10.3 million, or 58%, from €17.7 million for 2018. The increase was partially attributable to certain one-time effects as well as to higher product sales under our collaboration agreements, which resulted in increases in materials and third party services of €2.6 million and €4.9 million, respectively, as compared to 2018. The increase in materials expense was primarily due to €3.6 million higher inventory write-downs, partially offset by lower materials costs from the product sales mix. The increase in third party expenses was primarily due to €2.7 million additional

costs for set-up and quality assurance activities for our production processes and €1.5 million as a result of additional costs for required rework of certain products.

	For the years ended December 31,	
	2018	2019
	<u>(in thousands of euros)</u>	
Personnel	(7,703)	(9,855)
Materials	(4,941)	(7,542)
Third-party services	(2,340)	(7,268)
Maintenance and lease	(1,758)	(1,060)
Amortization and depreciation	(893)	(2,038)
Other	(109)	(220)
Total	<u>(17,744)</u>	<u>(27,983)</u>

Selling and distribution expenses

Selling and distribution expenses were €1.8 million for 2019, representing an increase of €0.7 million, or 64%, from €1.1 million in 2018. The increase was primarily attributable to increased personnel expenses resulting from share-based compensation.

	For the years ended December 31,	
	2018	2019
	<u>(in thousands of euros)</u>	
Personnel	(581)	(1,263)
Maintenance and lease costs	(300)	(167)
Amortization and depreciation	(95)	(81)
Other	(109)	(243)
Total	<u>(1,085)</u>	<u>(1,755)</u>

Research and development expenses

Research and development costs were €43.2 million for 2019, representing an increase of 4% from €41.7 million in 2018. The increase was primarily attributable to higher personnel expenses offset by reversal of provisions for share-based compensation in 2018.

	For the years ended December 31,	
	2018	2019
	<u>(in thousands of euros)</u>	
Materials	(5,867)	(4,015)
Personnel	(7,565)	(14,385)
Amortization and depreciation	(1,143)	(474)
Patents and fees to register a legal right	(4,847)	(4,551)
Third-party services	(19,921)	(18,626)
Maintenance and lease	(1,156)	(670)
Other	(1,223)	(521)
Total	<u>(41,722)</u>	<u>(43,242)</u>

The following table reflects our research and development costs for each of our programs for the years ended December 31, 2018 and 2019:

	For the years ended December 31,	
	2018	2019
	(in thousands of euros)	
Key Programs (CV8102 and CV7202)		
CV8102	(1,525)	(4,511)
CV7202	(1,987)	(2,236)
Other Research and Development Programs	(14,047)	(14,271)
Unallocated costs ⁽¹⁾	(24,163)	(22,224)
Total	(41,722)	(43,242)

(1) Unallocated costs primarily consist of costs associated with personnel expenses, patents and fees to register a legal right, amortization and depreciation, maintenance and lease expenses, certain third party service expenses and certain material expenses.

We expect that our total research and development expenses in 2020 will be significantly higher compared to our expenses in 2018 and 2019. Such increased research and development expenses primarily relate to the following key programs:

- Our lead oncology program, CV8102, which is currently in a Phase 1 dose escalating clinical trial for four types of solid tumors as a monotherapy and in combination with anti-PD-1.
- Our lead vaccine program, CV7202, which is currently in a Phase 1 clinical trial as a vaccine candidate for rabies.
- Our mRNA vaccine program against SARS-CoV-2, which we are advancing in response to the global pandemic due to COVID-19.

General and administrative expenses

General and administrative expenses were €49.0 million for 2019, representing an increase of €23.7 million, or 94%, from €25.3 million in 2018. The increase was primarily attributable to increased personnel expenses resulting from share-based compensation.

	For the years ended December 31,	
	2018	2019
	(in thousands of euros)	
Personnel	(10,084)	(31,645)
Maintenance and lease costs	(3,239)	(4,604)
Third-party services	(4,006)	(5,970)
Legal and other professional services	(4,078)	(2,110)
Amortization and depreciation	(1,635)	(2,182)
Other	(2,247)	(2,458)
Total	(25,289)	(48,969)

Other operating income

Other operating income was €5.6 million in 2019, representing an increase of €4.8 million, from €0.8 million for 2018. The increase was due to an increase in amounts recognized from grants from government agencies and similar bodies.

Other operating expense

Other operating expense was €0.6 million in 2019 and was relatively unchanged from 2018. Other operating expense related primarily to compensation expense for our supervisory board in both years.

Finance income

Finance income was €0.8 million in 2019, representing a decrease of €1.1 million, or 58%, from €2.0 million. The decrease was mainly attributable to higher unrealized foreign exchange gains in 2018.

Finance expenses

Finance expenses were €1.5 million in 2019, representing an increase of €1.2 million, or 500%, from €0.3 million for 2018. The increase related to interest on convertible loans in 2019.

Income tax benefit (expense)

An income tax benefit of €0.3 million was generated in 2019 compared to an income tax expense of €(0.1) million in 2018. The income tax benefit in 2019 results from income tax expenses from CureVac Inc., offset by recognition of deferred tax benefits relating to tax loss carryforwards.

Liquidity and Capital Resources

Our financial condition and liquidity is and will continue to be influenced by a variety of factors, including:

- our ability to generate cash flows from our operations;
- future indebtedness and the interest we are obligated to pay on this indebtedness;
- the availability of public and private debt and equity financing;
- changes in exchange rates which will impact our generation of cash flows from operations when measured in euros; and
- our capital expenditure requirements.

Overview

Since inception, we have incurred significant operating losses. For the three months ended March 31, 2019 and 2020, we incurred net losses of €21.3 million and €23.9 million, respectively. For the years ended December 31, 2018 and 2019, we incurred net losses of €71.2 million and €99.9 million, respectively. To date, we have financed our operations primarily through private placements of equity securities, issuance of convertible debt, grants from government agencies and similar bodies and payments for collaborative research and development services. Our cash and cash equivalents as of March 31, 2019 and 2020 were at €30.7 million and €43.5 million, respectively. Our primary cash needs are for working capital requirements, capital expenditures and to fund our non-clinical and clinical development programs.

Convertible Loans

We entered into a convertible loan agreement on May 3, 2019 with Mr. Dietmar Hopp, managing director of dievini, under which Mr. Hopp disbursed to us the amount of €50 million (“Convertible Loan I”). On October 24, 2019, we entered into an additional convertible loan agreement with Mr. Hopp, as amended, under which we have the right to call for disbursements in two tranches of €20 million each and an additional final tranche of approximately €24 million, until December 31, 2021 (“Convertible Loan II,” and together with Convertible Loan I, the “Convertible Loans”). The Convertible Loans bear an interest rate of 8.00% per annum. As of March 31, 2020, the outstanding principal amount is €69.9 million. On June 26, 2020, Mr. Hopp disbursed to us additional \$26.8 million. On July 24, 2020, we terminated the convertible loan agreements. We plan to repay the Convertible Loans prior to the consummation of this offering. See note 12 to our financial statements contained elsewhere in this prospectus for further information on the Convertible Loans.

European Investment Bank Loan

In June 2020, we signed a financing arrangement with the EIB, under which EIB agreed to provide us with a line of credit in an amount of up to €75 million for the partial financing of our clinical developments

and large-scale production of our infectious diseases vaccine candidates including our vaccine against SARS-CoV-2, or the Investment, provided that the amount of financing does not exceed 50% of the cost of the Investment. The EIB financing falls under a joint initiative between EIB and the European Commission, which is intended as a new EIB financing instrument to finance inter alia research projects and research infrastructure under the Horizon 2020 framework program of the European Union for Research and Technological Development (2014-2020). The EIB financing will be provided in three €25 million tranches upon completion of pre-defined milestones that will be measured prior to the disbursement of each tranche. These pre-defined milestones are tied to evidence of successful progress in the development and large-scale production of our vaccine candidate against SARS-CoV-2. In addition, the disbursements of the second and third tranches are contingent upon the disbursement of the first and second tranches, respectively. Interest accrues on the outstanding balance of each tranche at a rate of 0.5% per annum. Such interest is due and payable on the maturity date of each tranche or where a tranche is cancelled or prepaid, the prepayment date. The maturity date for each tranche is seven years from the respective disbursement date of the relevant tranche. We are subject to several restrictive covenants on our business activities as described in Schedule H of the financing agreement, including limitations on certain merger and acquisition transactions, disposition of certain assets and mandatory maintenance of assets related to the Investment. As of July 31, 2020, we have not yet drawn any disbursement under the first tranche. We expect to receive disbursements under the first and second tranches in the near-term; however, we have yet to achieve the pre-defined milestones required for disbursements under the third tranche. EIB may demand, without prior notice, the immediate repayment of outstanding principal together with any accrued interest upon certain events including, among others, our failure to continue the development of our Investment following a cure period or upon the payment of the convertible loans entered into between us and Mr. Dietmar Hopp if we fail to consummate the concurrent private placement to Mr. Hopp of €100 million before December 21, 2020. See “Related Party Transactions — Convertible Loans with Mr. Hopp.” See note 16 to our financial statements contained elsewhere in this prospectus for further information.

Comparative Cash Flows

Comparison of the Three Months Ended March 31, 2019 and 2020

	For the Three Months Ended March 31,	
	2019	2020
	(in thousands of euros) (unaudited)	
Net cash flow from (used in):		
Operating activities	(22,630)	(2,680)
Investing activities	16,723	(3,319)
Financing activities	(279)	18,742
Effect of currency translation gains on cash and cash equivalents	36	47
Overall cash inflow (outflow)	<u>15,260</u>	<u>43,474</u>

Operating Activities

Net cash used in operating activities for the three months ended March 31, 2020 was €2.7 million as compared to €22.6 million for the three months ended March 31, 2019. The decrease in net cash used in operating activities was primarily attributable to an overall decrease in trade receivables and contract assets, as a result of collections, and receipts from grants from government agencies and similar bodies, partially offset by the increase of the loss before income taxes.

Investing Activities

Net cash used in investing activities for the three months ended March 31, 2020 was €3.3 million as compared to Net cash provided by investing activities of €16.7 million for the three months ended March 31,

2019. The change in cash flow provided by or used in investing activities was primarily attributable to proceeds from the sale of short-term investments (other financial assets) received in the three months ended March 31, 2019.

Financing Activities

Net cash provided by financing activities was €18.7 million for the three months ended March 31, 2020 as compared to Net cash used in financing activities of €0.3 million for the three months ended March 31, 2019. The change in cash flow provided by or used in financing activities was mainly attributable to proceeds from the issuance of share capital in the three months ended March 31, 2020.

Comparison of the Year Ended December 31, 2018 and 2019

The following table summarizes our cash flows from operating, investing and financing activities for the periods indicated:

	For the years ended December 31,	
	2018	2019
	(in thousands of euros)	
Net cash flow from (used in):		
Operating activities	(74,110)	(86,963)
Investing activities	(4,264)	28,181
Financing activities	(112)	67,979
Effect of currency translation gains on cash and cash equivalents	213	107
Overall cash inflow (outflow)	<u>(78,273)</u>	<u>9,304</u>

Operating Activities

Net cash used in operating activities for the year 2019 was €87.0 million as compared to €74.1 million for 2018. The increase in net cash used in operating activities was primarily attributable to the increase of the loss before income taxes and due to an increase in trade receivables and inventory.

Investing Activities

Net cash from investing activities was €28.1 million for 2019 as compared to net cash used in investing activities of €4.3 million for 2018. The increase in net cash from investing activities was primarily attributable to proceeds from the sale of short-term investments and decreased purchases of intangible assets.

Financing Activities

Net cash from financing activities was €68.0 million for 2019 as compared to €0.1 million for 2018. The increase in cash flow from financing activities was primarily attributable to proceeds from convertible loans.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Contractual Obligations and Commitments

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2019 and the effects, including estimated interest payments, that such obligations are expected to have on our liquidity and cash flows in future periods:

	Payment Due by Period						
	Total	2020	2021	2022	2023	2024	Thereafter
	(in thousands of Euros)						
Convertible loans	(83,940) ⁽¹⁾	—	—	(83,940)	—	—	—
Lease liabilities	(17,121)	(2,843)	(2,298)	(2,298)	(2,298)	(2,298)	(5,086)
Total	(101,061)	(2,843)	(2,298)	(86,238)	(2,298)	(2,298)	(5,086)

(1) Upon consummation of this offering, based on the terms of the Loans, the amount outstanding, including accrued interest, could convert into shares of CureVac AG that will be contributed and transferred to CureVac B.V. in a capital increase in exchange for newly issued common shares of CureVac B.V. as part of our corporate reorganization.

We have entered into various agreements with collaborators, including licensing agreements. These agreements provide for us to make milestone and royalty payments that are conditional on the achievement of certain development, regulatory and commercial milestones and certain of these agreements provide us an option to obtain further licenses which could additionally require us to make such milestone and royalty payments. As of March 31, 2020, the aggregate amount of such potential milestone payments, including those relating to licenses acquired from exercised options, under all such collaboration agreements, was up to approximately \$92.5 million. The timing of these payments, and whether they become due, is conditional on achieving the applicable milestones.

We enter into contracts in the normal course of business with third-party contract organizations for clinical trials, preclinical studies, manufacturing and other services and products for operating purposes. These contracts generally provide for termination following a certain period after notice and therefore we believe that our noncancelable obligations under these agreements are not material and they are not included in the table above.

We have not included milestone or royalty payments or other contractual payment obligations in the table above if the timing and amount of such obligations are unknown or uncertain.

Future Capital Requirements

We expect our expenses to increase in connection with our ongoing activities. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Our expenses will also increase if, and as, we:

- advance the development of our clinical programs;
- leverage our programs to advance our other product candidates into preclinical and clinical development;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- seek to discover and develop additional product candidates;
- establish a sales, marketing, medical affairs and distribution infrastructure to commercialize any product candidates for which we may obtain marketing approval and intend to commercialize on our own or jointly;
- hire additional clinical, quality control and scientific personnel;
- expand and/or build out the manufacturing capacities and production volume of our GMP I/II and GMP III facilities, continue construction of our GMP IV facility, and construct or operate additional facilities;

- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company;
- advance the testing, process development and operation of the RNA Printer™ prototypes;
- secure, maintain, expand, enforce and protect our intellectual property portfolio; and
- acquire or in-license other product candidates and technologies.

We believe that the anticipated net proceeds from this offering, together with our existing cash, cash equivalents, borrowings available to us and short-term investments, will enable us to fund our operating expenses and capital expenditure requirements through . We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect.

A change in the outcome of any of these or other variables with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate. Further, our operating plans may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such operating plans.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic partnerships or marketing, distribution or licensing arrangements with third parties and grants from organizations and foundations. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be materially diluted, and the terms of such securities could include liquidation or other preferences that may adversely affect your rights as a common shareholder. Debt financing and preferred equity financing, if available, may involve agreements that include restrictive covenants that limit our ability to take specified actions, such as incurring additional debt, making capital expenditures or declaring dividends. In addition, debt financing would result in increased fixed payment obligations.

If we raise funds through collaborations, strategic partnerships or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us.

If we are unable to raise additional funds when needed, we may be required to delay, reduce or eliminate our product development or future commercialization efforts or to grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Quantitative and Qualitative Disclosures About Market Risk

In the ordinary course of our business activities, we are exposed to various market risks that are beyond our control, including fluctuations in foreign exchange rates, which may have an adverse effect on the value of our financial assets and liabilities, future cash flows and profit. As a result of these market risks, we could suffer a loss due to adverse changes in foreign exchange rates in the countries in which we operate. Our policy with respect to these market risks is to assess the potential of experiencing losses and the consolidated impact thereof and to mitigate these market risks. We are not currently exposed to significant interest rate risk because we do not currently hold long-term debt that is exposed to market rates. See note 15 to our financial statements contained elsewhere in this prospectus for further information on our risk management policies and exposure to market risks.

Credit Risk

Our credit risk arises primarily from cash and cash equivalents and other financial assets, including deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and contract assets. These financial instruments approximate fair value due to short-term maturities. We maintain our cash and cash equivalents and short-term investments with high credit quality financial institutions. We believe that our credit policies reflect normal industry terms and business risk.

Foreign Currency Risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Our exposure to the risk of changes in foreign exchange rates relates primarily to our operating activities (when revenue or expense is denominated in a foreign currency) and the amounts held as cash and cash equivalents. Our consolidated financial statements are reported in euros. We generate a significant portion of our revenue and incur a significant portion of our expenditures in certain non-euro currencies, principally U.S. dollars. We are exposed to fluctuations in foreign currency exchange rates primarily on revenue generated from sales in these foreign currencies. Our results of operations can be affected if the U.S. dollar appreciates or depreciates against the euro. As of December 31, 2019, if the euro had weakened 10% against the U.S. dollar with all other variables held constant, pre-tax loss for the year would have been €3.4 million (2018: €1.2 million) lower and post-tax loss would have been €2.4 million lower (2018: €0.8 million). Conversely, if the euro had strengthened 10% against the U.S. dollar with all other variables held constant, pre-tax loss would have been €2.8 million (2018: €1.0 million) higher and post-tax loss would have been €2.0 million (2018: €0.7 million) higher. The effects on pre- and post-tax loss and (accumulated) other comprehensive income due to fact that our subsidiary CureVac Inc.'s functional currency is the U.S. dollar would still have been immaterial at December 31, 2019 and March 31, 2020.

To the extent that we need to convert U.S. dollars we receive from this offering into foreign currencies for our operations, appreciation of such foreign currencies against the U.S. dollar would adversely affect the amount of such foreign currencies we receive from the conversion. Sensitivity analysis is used as a primary tool in evaluating the effects of changes in foreign currency exchange rates on our business operations. The analysis quantifies the impact of potential changes in these rates on our earnings, cash flows and fair values of assets and liabilities during the forecast period, most commonly within a one-year period. The ranges of changes used for the purpose of this analysis reflect our view of changes that are reasonably possible over the forecast period. Fair values are the present value of projected future cash flows based on market rates and chosen prices.

Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Our exposure to the risk of changes in market interest rates relates primarily to our cash and cash equivalents with floating interest rates. Due to persistent low-interest-rates we may be exposed to the risk of being charged negative interest rates on our bank deposits. If interest rates as of December 31, 2018 and 2019 had been 1% higher while all other variables had remained the same, the net loss for the year (before and after tax) would have been €0.3 million (2018: €0.2 million) lower, because the higher interest income would have been generated from floating rates on invested cash and cash equivalents.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with IFRS as issued by the IASB. Some of the accounting methods and policies used in preparing the financial statements under IFRS are based on complex and subjective assessments by our management or on estimates based on past experience and assumptions deemed realistic and reasonable based on the circumstances concerned. The actual value of our assets, liabilities and shareholders' equity and of our earnings could differ from the value derived from these estimates if conditions changed and these changes had an impact on the assumptions adopted.

Our significant accounting policies that we believe to be critical to the judgments and estimates used in the preparation of our financial statements are included in "note 2 — Significant accounting judgments, estimates and assumptions" and "note 9 — Share-based payments" to our consolidated financial statements included elsewhere in this prospectus.

Recent Accounting Pronouncements

We have applied, in our consolidated financial statements for the year 2019, new standards and amendments as issued by IASB and that are mandatory as of January 1, 2019. See note 2 to our consolidated financial statements included elsewhere in this prospectus for further information these new standards and amendments.

The new standards and interpretations applicable on a mandatory basis for fiscal years beginning on or after January 1, 2019, as disclosed in note 2 to our financial statements, mainly relate to IFRS 16 Leases. IFRS 16 supersedes IAS 17 Leases, IFRIC 4 (Determining whether an Arrangement contains a Lease), SIC-15 (Operating Leases-Incentives) and SIC-27 (Evaluating the Substance of Transactions Involving the Legal Form of a Lease). The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model.

We adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of January 1, 2019. Under this method, the standard is applied retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application. We elected to use certain transition practical expedients, including applying the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application.

The following several other amendments and interpretations apply for the first time in 2019:

- IFRIC Interpretation 23: Uncertainty over Income Tax Treatment
- Amendments to IFRS 9: Prepayment Features with Negative Compensation
- Amendments to IAS 19: Plan Amendment, Curtailment or Settlement
- Amendments to IAS 28: Long-term interests in associates and joint ventures
- Annual Improvements 2015-2017 Cycle
 - IFRS 3 Business Combinations
 - IFRS 11 Joint Arrangements
 - IAS 12 Income Taxes
 - IAS 23 Borrowing Costs

These standards did not have a material impact on our consolidated financial statements. We have not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

Internal Control Over Financial Reporting

Historically, we have been a private company and did not maintain the internal accounting and financial reporting resources necessary to comply with the obligations of a public reporting company, including maintaining effective internal control over financial reporting. We and our independent registered public accountants identified a material weakness primarily related to (i) a lack of sufficient accounting and supervisory personnel who have the appropriate level of technical accounting experience and training and (ii) a lack of consistent application of our accounting processes and procedures. As a result of the material weakness, management failed to identify adjustments in various areas, including but not limited to grants from government agencies and similar bodies and capitalization of tangible and intangible assets.

We have initiated a remediation plan to address this material weakness; however, our control environment can still be improved, and as a result, we may be exposed to errors. Our remediation plan includes hiring additional senior level and staff accountants to support the timely completion of financial close procedures, implement robust processes, and provide additional needed technical expertise, and in the interim, continuing to engage third parties as required to assist with technical accounting, application of new accounting standards, tax matters and valuations of equity instruments. Additionally, we intend to develop and implement consistent accounting policies and internal control procedures. In addition, we will provide additional training to our accounting and finance staff. While we are working to remediate the weakness as quickly and efficiently as possible, we cannot at this time, provide an estimate of the timeframe we expect in connection with implementing our plan to remediate this material weakness.

JOBS Act Exemptions and Foreign Private Issuer Status

JOBS Act

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the JOBS Act. As an emerging growth company, we may take

advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- the ability to present only two years of audited financial statements in addition to any required interim financial statements and correspondingly reduced disclosure in management’s discussion and analysis of financial condition and results of operations in this prospectus;
- exemption from the auditor attestation requirement of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, in the assessment of our internal controls over financial reporting; and
- to the extent that we no longer qualify as a foreign private issuer, (i) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and (ii) exemptions from the requirements of holding a non-binding advisory vote on executive compensation, including golden parachute compensation.

We may take advantage of these exemptions for up to five years or until such earlier time that we are no longer an emerging growth company. We will cease to be an emerging growth company upon the earliest to occur of (i) the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; (ii) the date we qualify as a “large accelerated filer” with at least \$700 million of equity securities; (iii) the issuance, in any three-year period, by our company of more than \$1.0 billion in non-convertible debt securities held by non-affiliates; and (iv) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

We may choose to take advantage of some but not all of these reduced burdens. For example, we have presented only two years of audited financial statements and only two years of related “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus, and intend to take advantage of the exemption from auditor attestation on the effectiveness of our internal control over financial reporting in our annual report on Form 20-F. To the extent that we take advantage of these reduced burdens, the information that we provide shareholders may be different than you might obtain from other public companies in which you hold equity interests.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Given that we currently report and expect to continue to report under IFRS as issued by the IASB, we have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required by the IASB. Since IFRS makes no distinction between public and private companies for purposes of compliance with new or revised accounting standards, the requirements for our compliance as a private company and as a public company are the same.

Foreign Private Issuer

We are also considered a “foreign private issuer.” In our capacity as a foreign private issuer, we are exempt from certain rules under the Exchange Act that impose certain disclosure obligations and procedural requirements for proxy solicitations under Section 14 of the Exchange Act. In addition, our managing directors, supervisory directors and our principal shareholders are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and the rules under the Exchange Act with respect to their purchases and sales of our common shares. Moreover, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. In addition, we are not required to comply with Regulation FD, which restricts the selective disclosure of material information.

We may take advantage of these exemptions until such time as we are no longer a foreign private issuer. We will remain a foreign private issuer until such time that more than 50% of our outstanding voting securities are held by U.S. residents and any of the following three circumstances applies: (i) the majority of our managing directors or supervisory directors are U.S. citizens or residents; (ii) more than 50% of our assets are located in the United States; or (iii) our business is administered principally in the United States.

We have taken advantage of certain reduced reporting and other requirements in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies.

BUSINESS

Overview

We are a global clinical-stage biopharmaceutical company developing a new class of transformative medicines based on messenger ribonucleic acid that has the potential to improve the lives of people. Our vision is to revolutionize medicine and open new avenues for developing therapies by enabling the body to make its own drugs. Messenger ribonucleic acid, or mRNA, plays a central role in cellular biology in the production of proteins in every living cell. We are the pioneers in successfully harnessing mRNAs designed to prevent infections and to treat diseases by mimicking human biology to synthesize the desired proteins. Our technology platform is based on a natural approach to optimize mRNA constructs that encode functional proteins that replace defective or missing proteins using the cell's intrinsic translation machinery. Our current product portfolio includes clinical and preclinical candidates across multiple disease indications in oncology, prophylactic vaccines and protein therapy. Our lead clinical programs are CV8102, which we are evaluating in a Phase 1 clinical trial for the treatment of four types of solid tumors, and CV7202, which we are currently investigating in a Phase 1 clinical trial for potential vaccination against rabies. We are also rapidly advancing our mRNA vaccine program against coronavirus SARS- CoV-2), for which we initiated a Phase 1 clinical trial in healthy volunteers in June 2020, with results expected in the fourth quarter of 2020.

mRNA-based medicines represent a novel class of medicine that have the potential to address limitations of conventional treatment modalities. We believe the modular nature of mRNA has the potential for higher efficacy, greater speed and lower cost of production as compared to conventional treatment modalities. mRNA delivery enables direct production of any protein (secreted, membrane and intracellular) in the body and has shown a wide range of activity. The flexible chemical structure of mRNA, utilizing only four nucleotide building blocks, allows us to encode for a broad range of proteins with simple sequence changes, offering design versatility, specificity and limited off-target effects. Transient expression of mRNA limits the risk of irreversible changes to the cells' DNA and allows for modified dosing based on a patient's needs as well as opportunity for repeat dosing. We believe the modular nature of mRNA has the potential for higher efficacy, greater speed and lower cost of production as compared to conventional treatment modalities. We are leveraging these inherent advantages of mRNA-based medicines in the development of our mRNA technology platform.

We have built an extensive expertise in the fields of mRNA biology, optimization and production. We have continued to invest in developing our proprietary technology platform, which we refer to as the RNAoptimizer, over the past 20 years. We optimize mRNAs to preserve critical protein-RNA interactions as these are an inherent feature of the natural building blocks we employ. Our differentiated technology platform is designed to optimize each component of the mRNA-based medicine. Our RNAoptimizer platform is built on three core pillars:

- **Protein design:** optimizing the specific properties of encoded protein;
- **mRNA optimization:** increasing half-life and translation efficacy of the mRNA molecule; and
- **mRNA delivery:** selecting the best-suited delivery system from our diverse portfolio of proprietary and third party delivery systems.

By leveraging each of these pillars, we have observed improved required protein expression levels while modulating the interaction with the immune system in preclinical and clinical trials. We continue to invest in all levels of optimization to improve the methods we currently employ and to further advance our mRNA-based medicines.

We consider our manufacturing process an important part of our strategy that allows us to continuously improve our technology platform and maintain flexibility in clinical development. We control the critical steps of manufacturing in-house, which allows us to drive innovation and to maintain flexibility, which allows us to pivot quickly in clinical development and potential commercialization. For other non-critical manufacturing steps, such as starting material, formulation and fill and finish, we rely on CMOs. We currently operate three GMP-certified suites, with the capacity to supply our clinical programs and potential early commercialization activities. We are in the process of building a fourth GMP facility that will support our future commercial launches. Based on the doses and response seen in our CV7202 study,

we believe the fourth GMP facility, which is being designed to cover all manufacturing steps from starting material to formulation, could potentially supply materials for billions of doses of our vaccine product candidates. In addition to our GMP manufacturing facilities, we are developing a novel downsized and automated process for producing our mRNA, which we refer to as the RNA Printer. With its modular design and decentralized concept, we believe that it could be used for a rapid first response in outbreak scenarios or be placed as a stand-alone device in front lines of epidemic areas.

Our approach seeks to mitigate clinical and developmental risk across multiple levels to advance and expand our broad product portfolio. We have made advances in utilizing the potential of our technology platform through rational disease selection. We consider a number of factors in our disease selection process including unmet medical need, immune response, duration of expression, dosing requirements, delivery, and targeted tissue types, among other factors. Our programs target the underlying modes of action of the disease that play a critical role in the pathology of the disease. We are initially targeting diseases that require an active immune response (such as prophylactic vaccines and oncology) and require transient expression of mRNA in tissue types that are more easily accessible. We believe these initial indications are amenable to localized delivery using a lipid nanoparticle, or LNP, delivery system. Following the encouraging results from our initial prophylactic vaccines program in clinical studies and based on our advanced understanding of mRNA biology and immune stimulation control, we have expanded our product portfolio to target indications that require an immune silent approach (such as protein delivery), given the need for higher doses, repeated dosing and longer expression of the protein. These initial indications are using LNP delivery systems, or our proprietary polymer based delivery system, which we refer to as the CureVac Carrier Molecule, or CVCM. Our access to a broad range of delivery systems allows us to target multiple tissue types.

We are exploring a range of potential approaches in oncology including intratumoral therapy and novel cancer vaccines targeting neoepitopes and tumor associated antigens. mRNA-based medicines offer a versatile platform for cancer vaccine development, allowing us to encode a wide range of antigens from full length tumor associated antigens to neoepitopes. Our lead oncology candidate, CV8102, is a complex of single-stranded non-coding RNA which has been optimized to maximize activation of cellular receptors that normally detect viral pathogens entering the cells (such as toll-like receptor 7, or TLR7, TLR8, and retinoic acid inducible gene I, or RIG-I pathways), mimicking a viral infection of the tumor. CV8102 is designed to recruit and activate antigen-presenting cells at the site of injection to present tumor antigens released from tumor cells to T cells in the draining lymph node. This potentially leads to activation of tumor specific T cells, which can kill tumor cells at the injected site, but also at distant non-injected tumor lesions or metastases. CV8102 is currently being evaluated in a Phase 1 clinical trial for the treatment of four types of solid tumors — cutaneous melanoma, or cMEL, adenoidcystic carcinoma, or ACC, and squamous cell carcinoma of skin, or SCC, as well as squamous cell carcinoma of head and neck, or HNSCC. As of April 2020, we have enrolled 40 patients (24 in the single agent cohort and 16 in the combination cohort with anti-PD-1) in the Phase 1 dose-escalation portion of the study. As of April 2020, we have observed preliminary evidence of single agent activity with objective tumor responses observed in two melanoma patients and two additional patients have shown a stabilization of their disease, including shrinkage of non-injected lesions. Overall, eight out of 24 patients treated with single agent CV8102 remained free of progression for at least 24 weeks. Based on the results from the Phase 1 clinical trial, we plan to determine the recommended dose for Phase 2.

Our mRNA technology platform has shown potential in the development and production of prophylactic vaccines against infectious diseases. mRNA-based vaccines can encode for specific protein antigens of choice, including combinations of multiple antigens, offering potential for the development of prophylactic vaccines against multiple known and as yet unidentified pathogenic threats. mRNA vaccines are also generally expected to be safer than live or attenuated vaccines since no living virus is injected. Our lead vaccine program, CV7202, is being developed for prophylactic vaccination against rabies. CV7202 is an mRNA that encodes the rabies virus glycoprotein, RABV-G, formulated with LNPs. We are currently investigating CV7202 in Phase 1 clinical trial, evaluating safety, including reactogenicity, and immunogenicity. In January 2020, we reported preliminary data from our Phase 1 trial of CV7202 in rabies. CV7202 induced adaptive immune response as shown by rabies-specific virus-neutralizing antibody titers, or VNTs, above the World Health Organization, or WHO, thresholds considered to be protective after the second dose in all subjects, at the lowest 1 μ g and 2 μ g dose levels. We also showed that the lowest dose levels (1 μ g and

2µg mRNA) were generally well tolerated. We plan to report follow up data from our Phase 1 clinical trial in the fourth quarter of 2020 and initiate a Phase 2 clinical trial by mid-2021.

In response to the global pandemic due to novel coronavirus 2019 disease, or COVID-19, we have rapidly advanced our mRNA vaccine program against SARS-CoV-2. Upon publication of the sequence of the novel coronavirus disease (SARS-CoV-2), at the end of January 2020, we designed and optimized a variety of potential antigenic constructs based on the spike (S) protein to elicit high immunogenicity. Early exploratory data on these constructs indicated high immunogenicity and titers of S specific binding and neutralizing antibodies in mice after a vaccination. The results of our preclinical studies suggest that our vaccine candidate against SARS-CoV-2 was active at low dose (2µg) and triggered fast induction of a balanced immune response with high levels of VNTs and T-cell responses. Based on the preclinical results, we initiated a Phase 1 clinical trial in healthy volunteers in June 2020, with results expected in the fourth quarter of 2020. We are working closely with many organizations, including the Coalition for Epidemic Preparedness Innovations, or CEPI, on the development of this vaccine candidate. We have also produced material for our vaccine candidate in our GMP III facility in anticipation of clinical trials.

Our development efforts for protein therapy are based on delivering optimized mRNAs to trigger production of antibodies or therapeutic proteins. Using our technology, we can instruct human cells to produce specific proteins in the nucleus, cytoplasm, cellular organelles, cell membrane, or get them secreted. Based on this “healthy” information delivered by mRNA, our cells can produce proteins, which are required to treat the disease caused by missing or inactive proteins. Protein therapy spans broad therapeutic areas and has the potential to be used as a treatment against infectious diseases in passive immunization (protection against an infectious disease with the encoding of the adequate protective antibody) and toxins (protection against a toxin with the encoding of the adequate protective antibody) and to be applied in many disease indications including cancer (mRNA encoded cancer antibodies), cardiovascular diseases, and autoimmune diseases. Our mRNA optimization process, which is a core pillar of our RNAoptimizer platform, is designed to increase protein expression with the aim to reach therapeutic levels. In preclinical studies in non-human primates, we have demonstrated that antibodies encoded by mRNA can be produced in hepatocytes very rapidly and can reach therapeutic levels in the blood stream. We are also currently advancing multiple undisclosed programs in preclinical studies across liver and rare diseases, eye disorders, lung diseases as well as delivering therapeutic antibodies.

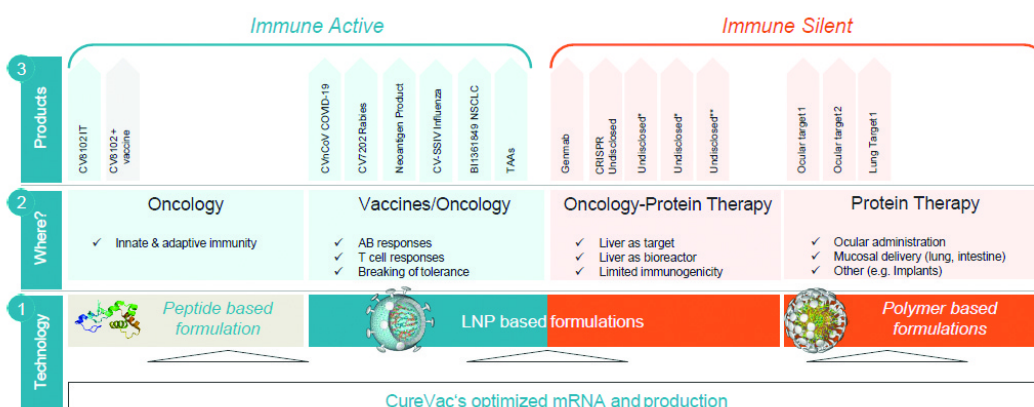
We have built an intellectual property portfolio in the United States, Europe and other major geographies. As of May 31, 2020, we own approximately 693 issued patents worldwide, including 49 issued U.S. patents, 50 issued European patents (which have been validated in various European countries resulting in a total of approximately 506 national patents in European countries), and 138 issued patents in other foreign countries, 119 pending U.S. patent applications, 79 pending European patent applications and 314 pending patent applications in other foreign countries. Our patent portfolio includes claims relating to our RNA technology platform, our CVCV delivery system and our CV8102, CV7202, CV-SSIV and SARS-CoV-2 product candidates.

We are led by a team of veterans with extensive experience in the biopharmaceutical industry, including experience in nucleic acid therapy, oncology, rare and infectious diseases, and antibodies. Our management team as well as our supervisory board members have broad expertise in the clinical, regulatory, and commercialization aspects of oncology, prophylactic vaccines and protein therapy as well as in drug development, process development, and manufacturing for mRNA therapies. We currently have over 450 employees, including 116 employees with advanced scientific degrees. Since our founding, we have raised €1.03 billion in gross proceeds from a combination of equity and convertible debt financings, with an additional €44 million of external committed financing outstanding.

Our Product Portfolio

Our differentiated mRNA technology platform is designed to address a broad range of diseases across multiple therapeutic areas. Given the strengths of our platform, the broad potential of mRNA-based medicines, and our rational approach to disease selection, we have chosen to leverage our platform to initially focus on advancing our product candidates in the areas of oncology, infectious diseases and protein therapy.

A disease indication may require an approach that triggers an immune response (immune active), or that does not require immune activation (immune silent). Each of the disease indications that we are targeting require different levels of immune activation for the mRNA-based medicines to be effective. Our approach is initially focused on RNA or mRNA-based medicines that trigger an immune response such as oncology and prophylactic vaccines. Based on the proof of concept clinical data from our prophylactic vaccine programs, we have expanded our preclinical product portfolio to include mRNA therapies based on the expression of therapeutic proteins (including liver, ocular and mucosal applications).



* Focused on liver-specific metabolic disorders, with the goal to restore the specific enzyme or protein that is deficient in the liver by LNP-mediated delivery of mRNA to the liver.

** Undisclosed lysosomal storage disorder using liver as a bioreactor.

Our lead proprietary programs include:

- Our lead oncology program, CV8102, is currently in a Phase 1 dose escalating clinical trial for four types of cancers as a monotherapy and in combination with anti-PD-1. Based on the results from the Phase 1 trial, we plan to determine the recommended dose for Phase 2.
- Our lead vaccine program, CV7202, is currently in a Phase 1 clinical trial as a vaccine candidate against rabies. We plan to report follow up data from our Phase 1 clinical trial in the fourth quarter of 2020 and to initiate a Phase 2 clinical trial by mid-2021.
- In response to the global pandemic due to COVID-19, we have rapidly advanced our mRNA vaccine program against SARS-CoV-2. Based on the results of preclinical studies, we initiated a Phase 1 clinical trial in June 2020, with results expected in the fourth quarter of 2020.

Our key partnered programs include:

- We have partnered with Boehringer Ingelheim for the development of BI1361849 (previously CV9202) which is a therapeutic vaccine candidate designed to elicit antigen-specific immune responses against tumor-associated antigens frequently overexpressed in patients with non-small

cell lung cancer, or NSCLC. BI1361849 is currently being studied by the Ludwig Institute for Cancer Research in a Phase 1/2 clinical trial in NSCLC, in combination with durvalumab, a PD-L1 inhibitor, and tremelimumab, an anti CTLA-4 antibody.

- We have partnered with CRISPR Therapeutics for the development of novel Cas9 mRNA constructs for use in gene editing therapeutics, with improved properties such as increased potency, decreased duration of expression and reduced potential for immunogenicity. CRISPR Therapeutics has an exclusive license to the improved constructs in three of their *in vivo* gene editing programs.
- We have a broad strategic partnership with Genmab to leverage our mRNA technology platform to develop up to four mRNA based novel therapeutic antibodies. This represents the first publicly announced strategic partnership focused on differentiated mRNA-based antibodies.

- We have received grants from the Bill & Melinda Gates Foundation to develop prophylactic vaccines designed to prevent picornaviruses, influenza, malaria and rotavirus.
- We are collaborating with CEPI on the development of several vaccine projects including programs against SARS-CoV-2, Lassa virus and yellow fever. Further, we are collaborating with CEPI on the development of our RNA Printer.

We also have several academic collaborations, including with SERI for target discovery research in mRNA-based eye therapy, and Yale University for target discovery research in mRNA-based pulmonary therapy.

	Programs and Indications	Collaborations	Pre-Clinical Discovery	Pre-Clinical Development	Phase 1	Phase 2	Phase 3	CureVac Commercial Rights*
Oncology Intratumoral TAA	■ CV8102: Cutaneous Melanoma, Adenoidcystic Carcinoma, Squamous Cell Cancer of Skin and Head and Neck		→					Worldwide
	■ BI13618409 (CV9202): Non-Small Cell Lung Cancer		→					Eligible for milestones and royalties
	■ Tumor Associated Antigens (TAA)**		→					Worldwide
	■ Solid Tumor Program (mRNA Intratumoral Cocktail)**		→					Worldwide
Prophylactic Vaccines Disruptive Low dose Speed	■ CV7202: Rabies		→					Worldwide
	■ COVID-19	CEPI (3)	→					Worldwide
	■ Lassa, Yellow Fever	CEPI	→					Worldwide
	■ Respirational Syncytial Virus		→					Worldwide
	■ Other infectious diseases**		→					Eligible for milestones and royalties
	■ Diverse Projects (Rota, Malaria, Universal Influenza)		→					Worldwide
Protein Therapy Rare Disease Gene Editing Antibodies	■ Cas9 Gene-editing**		→					Eligible for milestones and royalties
	■ Liver Metabolic Disorders (Rare Diseases (1), Fibrosis (2))**		→					Worldwide
	■ Ocular Diseases**		→					Worldwide
	■ Lung Respiratory Diseases**		→					Worldwide
	■ Therapeutic Antibodies**		→					Eligible for milestones and royalties

* For further details on our collaboration agreements, see “Business — Collaborations” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Our Collaborations and Related License Agreements”

** Unidentified indication.

(1) Undisclosed lysosomal storage disorder using liver as a bioreactor.

(2) Focused on liver-specific metabolic disorders, with the goal to restore the specific enzyme or protein that is deficient in the liver by LNP-mediated delivery of mRNA to the liver.

(3) CEPI has committed to provide funding, which will be used for a Phase 1 clinical trial. See “Business — Collaborations — Coalition for Epidemic Preparedness Innovations Framework Partnering Agreement” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Our Collaborations and Related License Agreements — Coalition for Epidemic Preparedness Innovations”.

Our Strengths

We are developing a broad portfolio of product candidates currently in preclinical or Phase 1 development stages that we believe position us at the forefront of targeted immune active and immune silent mRNA medicines. Our key strengths include:

- **We have a differentiated mRNA technology platform that has the potential to address a wide range of diseases.** As the pioneers in the field of mRNA-based medicines, we have a deep understanding of mRNA biology, its interaction with the cellular translation machinery as well as the immune system. We have built our differentiated RNAoptimizer platform to incorporate these insights over the past 20 years. We optimize mRNA to preserve critical protein-RNA interactions as these are an inherent feature of the natural building blocks we employ. Given the potential advantages of the mRNA-based medicines over existing treatment modalities, such as potential for broad application, natural biology, wide range of activity, flexibility, design versatility, transient expression and a single manufacturing process, we believe that we have the potential to address a broad range of diseases across multiple therapeutic areas. Our technology platform has been validated in clinical and preclinical studies in selected disease indications.
- **We have a broad portfolio of mRNA-based medicines in preclinical or Phase 1 development stages being designed for efficacy, safety and protein expression at relatively low doses.** We are developing our product candidates and have conducted preclinical studies and initiated Phase 1 trials of several of our product candidates. The potential of our technology optimized for immune activation has been observed in multiple early stage clinical studies. Our lead oncology product candidate, CV8102, for the treatment of four types of solid tumors through intratumoral treatment, has shown evidence of single agent therapeutic activity with shrinkage of non-treated lesions, with limited treatment emergent adverse events. Our most clinically advanced vaccine product candidate, CV7202, for prophylactic vaccination against rabies, induced protective antibody titers above the WHO threshold in a Phase 1 study, following two doses as low as 1µg of mRNA. In addition, we have rapidly advanced our mRNA vaccine program against SARS-CoV-2 in response to the COVID-19 global pandemic. We are continuing to advance this program. Our vaccine candidate against SARS-CoV-2 was observed to be active at low dose (2µg) and triggered fast induction of a balanced immune response with high levels of VNTs and T-cell responses. Based on the results of preclinical studies, we initiated a Phase 1 clinical trial in June 2020, with results expected in the fourth quarter of 2020. We are working closely with many organizations, including CEPI, on the development of this vaccine. Our approaches optimized for protein therapies have been evaluated in multiple preclinical disease models.
- **We have the ability to target different tissue types based on our delivery systems.** We have access to a number of mRNA delivery systems, including third-party and our proprietary systems, which allow us to target distinct tissues in an optimal way. Our initial clinical programs are based on localized delivery or using the LNP delivery system. Our prophylactic vaccine programs rely on LNP-based delivery systems administered intramuscularly and provide access to the immune cells. Moreover, LNP based systems deliver mRNA efficiently to the hepatocytes in the liver, if administered intravenously. Protein expressed in the liver may either restore a specific function in the liver itself or produce secreted proteins for release into circulation. We rely on third-party state of the art LNP delivery systems for our initial clinical programs but we are developing our own proprietary LNP delivery system. In addition to LNPs, we have developed our proprietary polymer based delivery system called CVCM, which allows us to further expand into other indications. CVCMs offer the ability to target indications that require localized, long-term dosing and create formulations that are appropriate for certain tissue types (such as lung, eye and mucosal).
- **We have invested in building our in-house manufacturing infrastructure, capabilities and expertise to rapidly, efficiently and cost-effectively produce mRNA-based medicines at commercial scale.** We have continued to invest in our manufacturing platform since 2000 and have manufactured thousands of mRNA constructs and obtained manufacturing authorization for over 80 products. All of our mRNA-based active ingredients for various fields of application originate from a common technology platform and are based on identical source materials, which enables us to produce mRNA-based medicines using a substantially similar platform process concept. We currently have three certified GMP suites, with the ability to produce mRNA material for our late stage clinical studies and early commercialization activities. For other non-critical manufacturing steps, such as starting material, formulation and fill and finish, we rely on CMOs. In December 2019, our GMP III facility was certified by the EMA, allowing us to achieve

additional scale. We are currently constructing our GMP IV facility, which is being designed to cover all manufacturing steps from starting material to formulation and would allow us to scale up even further and provide supplies for our future commercialization efforts. Based on the doses and response seen in our CV7202 study, we believe our fourth GMP facility could potentially supply materials for billions of doses of our vaccine product candidates.

- **We have entered into strategic partnerships with leading biopharmaceutical companies and research and non-profit institutions to expand the applications of our technology platform.** We have a history of partnering with leading biopharmaceutical companies such as Boehringer Ingelheim, CRISPR Therapeutics and Genmab. We also have received research grants from the Bill & Melinda Gates Foundation and CEPI for the development of several prophylactic vaccines. Our academic collaborations are focused on identifying and evaluating novel targets in selected therapeutics areas. We have collaborations with SERI, and Yale University for eye disorder and pulmonary diseases, respectively. These partnerships and collaborations allow us to expand the application of our platform and bring in external expertise and capabilities.
- **We have built an intellectual property portfolio in a variety of markets for our platform and product candidates.** As pioneers in the field of mRNA therapies, we have built an intellectual property portfolio in the United States and other major geographies. As of May 31, 2020, we owned approximately 693 issued patents worldwide, including 49 issued U.S. patents, 50 issued European patents (which have been validated in various European countries resulting in a total of approximately 506 national patents in European countries), and 138 issued patents in other foreign countries, 119 pending U.S. patent applications, 79 pending European patent applications and 314 pending patent applications in other foreign countries. These patents include claims relating to our mRNA technology platform, our CVCM delivery system, CV8102, CV7202, and other product candidates. We believe our patent applications and other patents are the most cited among mRNA companies' intellectual property.
- **We have a long history of mRNA research and development and are led by an experienced management team.** We are led by veterans of the biopharmaceutical industry with extensive experience in nucleic acid therapy, oncology, rare and infectious diseases, and antibodies. Our management team as well as our supervisory board members have broad expertise in the clinical, regulatory, and commercialization aspects of oncology, prophylactic vaccines and rare diseases as well as in drug development, process development, and manufacturing for mRNA-based medicines. Members of our management team have held senior positions at Bristol-Myers Squibb, Ipsen, LION Bioscience, Pharmacia (Pfizer), Pixium Vision, Sirona Dental Systems, Sygnis Pharma AG and other companies. Our broader team includes over 115 individuals with advanced scientific degrees working on advancing our mRNA platform.

Our Strategy

Our goal is to build a leading, fully integrated mRNA-based medicines company that can transform the lives of people. The key components of our strategy include:

- **Continue to invest in our proprietary technology platform to be the leading mRNA platform company.** We intend to invest in our proprietary technology platform to broaden its potential across therapeutic areas, in addition to broadening our pipeline in existing therapeutic areas. We believe our continued investment will enable us to further optimize the three core pillars of our technology platform — protein design, mRNA optimization and mRNA delivery — and to further enhance our treatment approaches by offering higher selectivity, greater protein expression, potential combination therapies and reduced or flexible dosing. We are continuing to build on our deep expertise in mRNA-based medicines based on what we have learned from our current programs to apply to our future programs.
- **Utilize a rational disease selection approach to minimize clinical and commercial risk for our programs and broader platform.** Our strategy is to maximize the potential of our technology platform through our rational disease selection approach to clinical development. We are initially targeting diseases that require an active immune response (such as prophylactic vaccines and oncology) and require transient expression of mRNA in tissue types that are more easily accessible.

Based on the proof of concept achieved in our clinical trials for these initial indications, we have expanded our product portfolio to target diseases that require an immune silent approach (such as protein therapy).

- **Rapidly advance our lead product candidates through clinical development and regulatory approval.** Our product candidates are currently in preclinical or Phase 1 development stages. Our lead oncology candidate, CV8102, is currently being evaluated in a Phase 1 clinical trial for the treatment of four types of solid tumors — cMEL, ACC, SCC and HNSCC. Based on the results from the Phase 1 clinical trial, we plan to determine the recommended dose for Phase 2. Similarly, our most clinically advanced vaccine candidate, CV7202, is currently in development for the prophylactic vaccination of rabies. We intend to report results from our Phase 1 clinical trial in the fourth quarter of 2020 and initiate a Phase 2 clinical trial by mid-2021.

Additionally, we have rapidly advanced our mRNA vaccines against SARS-CoV-2 through preclinical studies. Based on the results from our preclinical studies, we initiated a Phase 1 study in healthy volunteers in June 2020, with results expected in the fourth quarter of 2020, and the goal of quickly proceeding to late stage clinical development. Given the urgency of the need for an effective vaccine for COVID-19, we intend to pursue an accelerated clinical development pathway.

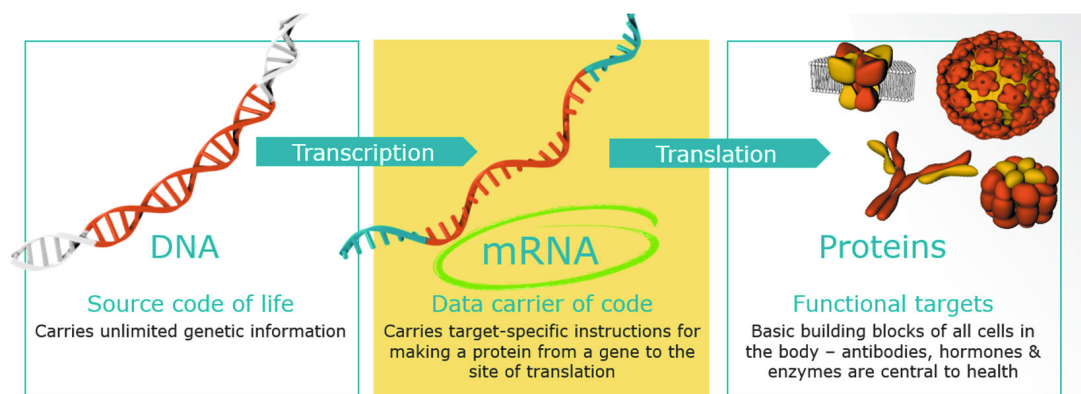
We believe that by initially targeting diseases with high unmet medical need, we will be able to rapidly advance our programs through clinical development. We intend to pursue the appropriate regulatory pathways available to further accelerate our development efforts.

- **Continue to invest in our manufacturing capabilities across all manufacturing steps from starting material to formulation to further add scale and flexibility for potential commercialization.** We believe that our manufacturing capabilities are a key strategic advantage that offer us flexibility, scalability, versatility and reliability in discovery and development. We are currently building our GMP IV facility, which is being designed to cover all manufacturing steps from starting material to formulation and would allow us to further scale up, reduce manufacturing time and reduce production costs. In addition, we are developing a new automated production concept, the RNA Printer, which would enable downscaling of the production of mRNA material, allowing us to be more flexible and respond rapidly to manufacturing needs. We have successfully manufactured a demonstration batch with the first RNA Printer prototype and are currently developing a second generation prototype.
- **Selectively seek strategic partners to develop and commercialize product candidates in certain therapeutic areas and geographies.** We plan to continue to seek additional partnerships with other leading biopharmaceutical companies with specialized capabilities, including development and commercialization expertise in selected therapeutic areas and geographies. We may pursue partnerships that allow us to expedite the discovery and development of product candidates, complement our internal development expertise, broaden the breadth of our technology platform, and provide us with non-dilutive financing, while allowing us to retain economic rights to our product candidates that we view as strategically important. Our approach of partnering with a number of biopharmaceutical companies allows us to execute on a broad range of programs simultaneously, while mitigating our drug development risk.
- **Seek strategic acquisitions or in-licenses of technology or assets that are complementary to our programs and technology platform.** mRNA-based medicines is an emerging field with ongoing advancements and discoveries. As the pioneers in the field, we have made significant strides in advancing and optimizing our technology platform over the past 20 years. We may seek acquisitions and in-licensing opportunities that can augment our internal expertise, expand our competitive differentiation and further enhance our mRNA technology platform.
- **Strengthen and expand our intellectual property portfolio to protect our scientific and technical know-how.** We intend to continue to strengthen and expand our intellectual property to protect our advances in scientific and technical know-how. Our intellectual property strategy is focused on covering advancements in our technology platform, manufacturing processes, and product candidates. In addition to patent protection, we also rely on trade secrets and confidentiality agreements to protect other proprietary information that is not patentable or that we elect not to patent.

Overview of mRNA Therapeutics

The Role of mRNA

mRNA is a molecule instructing the translation of genetic information encoded in DNA by cells into proteins, which carry out essential cellular functions. As depicted in the figure below, genetic information stored in DNA is transferred to mRNA in a process called transcription in the cell nucleus. In transcription, double-stranded DNA is temporarily unwound and copied into single-stranded mRNA by the enzyme RNA polymerase. mRNA is then transported to the cytoplasm where it instructs synthesis of proteins through a process called translation. In translation, cellular structures called ribosomes decode mRNA bases in groups of three (called codons) as amino acids. Each codon specifies a particular amino acid which are the building blocks of protein molecules which perform distinct functions within the body.



Limitations of Existing Treatment Modalities

There are several existing treatment modalities that seek to address the underlying cause of absent or defective proteins associated with diseases, including protein replacement therapy, gene therapy, gene editing, RNA interference, and small molecule therapies. Other treatment modalities seek to harness the immune system, including antibody therapies and traditional prophylactic vaccines. Each of these treatment modalities have certain limitations as discussed below:

Protein Replacement Therapy: While this approach has been successfully used to treat a subset of protein-based disorders, it is mostly limited to proteins that function outside of the cell.

Antibody Therapy: Antibody therapeutics are largely administered intravenously and, being proteins themselves, have applications largely limited to surface molecules. In addition, antibodies have historically faced challenges due to their relatively large size, inadequate pharmacokinetics and tissue accessibility as well as unwanted interactions with the immune system.

Gene Therapy: Gene therapy is usually a one-time intervention meant to provide lasting levels of therapeutic protein. While expected to be a one-time treatment, the duration of treatment efficacy is still largely unknown and it may not be amenable to repeat dosing due to neutralizing antibodies against the gene therapy vehicle. In addition, large-scale manufacturing is costly, time-consuming, and complex.

Gene Editing: Despite its promise, gene editing is still in the early stages of development and has potential risks related to unwanted on- and off-target DNA modifications, incomplete targeting or mosaicism that hinder intended modifications. Similar to gene therapies, manufacturing complexities and costs for gene editing are also challenging.

RNA Interference: RNA interference has potential in silencing certain genes but has limitations in replacing defective or missing proteins, as well as highly expressed proteins. Most of the current efforts in this treatment modality are focused on genes expressed in the liver, with limited evidence of applications in extra-hepatic tissues.

Small Molecule: While small molecules offer advantages over other treatment modalities in terms of biodistribution, tolerability, and delivery, they do not directly address specific gene defects and have a high potential to cause off-target toxicities.

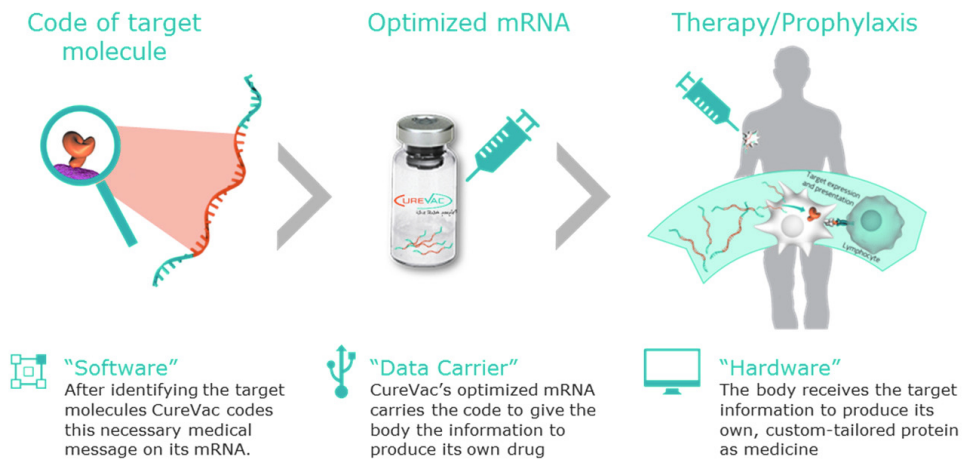
Traditional Prophylactic Vaccines: While traditional prophylactic vaccines are one of the most successful and cost-effective global health interventions, their complex development and costly production processes create a high barrier to entry, long development cycle and limitation in developing vaccines with high serotype coverage.

mRNA as a Novel Treatment Modality

mRNA, as the universal template for protein synthesis, can direct the synthesis of any protein in the body. To treat a medical condition, we identify a target protein and encode the information required to synthesize this protein on the mRNA. The mRNA, optimized using our platform, carries this code to give a patient's body the information to produce its own, custom-tailored protein as medicine.

mRNAs are typically characterized by their rate of translation into protein and their short and predictable, yet steerable half-life. We optimize these mRNA properties for specific therapeutic needs to provide the most efficacious mRNA-based medicine. mRNAs provide the flexibility to deliver medicines that are required for a limited time as well as the opportunity to deliver repeated doses that can be adjusted to patient needs. The development and manufacturing of mRNA-based medicines can also proceed much more quickly than traditional protein-based therapies, including antibodies.

The body can generate its own protein medicine. All it needs is the right information.



Key potential advantages of mRNA therapies that could position it as a novel treatment modality include:

Broad Application: mRNA has the ability to produce all types of proteins, including secreted, membrane and intracellular proteins. This enables broad applicability across a variety of diseases.

Natural Biology: mRNAs mimic human biology to produce proteins in the body in contrast to recombinant proteins that are manufactured using processes that are foreign to the body.

Wide Range of Activity: mRNAs can be used to create therapies that can be applied as an agonist, an antagonist or for vaccines.

Flexibility: A large number of alternative mRNA candidates can be generated in short time and tested to optimize both the mRNA and protein format.

Design versatility: Therapeutic protein expressed from mRNA *in situ* can be designed for efficacy without being limited by the constraints which recombinant proteins are subject to.

Specificity: mRNA-based medicines encode proteins which offer much higher specificity of interactions compared to small molecule drugs, which limits any potential off-target effects.

Repeat Dosing: mRNA-based medicines can be dosed repeatedly given their low immunogenicity.

Transient Expression: Short-lived expression of mRNA limits the risk of unforeseen adverse effects of lasting protein expression (as seen in gene therapy and gene editing) and allows for modified dosing schedules adjusted based on patient's needs.

Manufacturing: mRNA production process is independent of the encoded protein as changes to the mRNA sequence do not affect its chemical and physical properties, allowing for higher efficiency, greater speed and lower cost of production.

Historical Challenges with Developing mRNA Treatments

Using mRNA as a treatment has long been of interest given its potential to address limitations of existing treatment modalities. However, mRNA has historically been limited by the following theoretical and practical hurdles:

Stability: Naked mRNA is rapidly degraded by RNase enzymes present throughout the body which limits the duration of its therapeutic effect. An effective mRNA would need to be masked from these enzymes.

Uptake by cells: Uptake of naked mRNA into cells is relatively inefficient. A more effective mRNA-based medicine would need a delivery system that delivers mRNA efficiently into cells.

Expression level: Protein expression levels from synthetic mRNA obtained by *in vitro* production have been considered too low historically for therapeutic purposes, which underlines the need for an optimized mRNA construct.

Immunogenicity: Non-optimized mRNA in the body rapidly activates receptors on immune cells which triggers the innate immune response and can lead to shut down of protein translation in cells. An effective mRNA-based medicine needs to modulate the immune system according to the disease indication being targeted.

Tissue targeting: Each indication requires delivery to a specific tissue. An effective mRNA-based medicine would need a delivery system that efficiently delivers mRNA to a specific target tissue with low off-target delivery and toxicity.

Manufacturing: mRNA manufacturing technology must be scalable and cost-effective to enable large production for multiple clinical trials and commercialization.

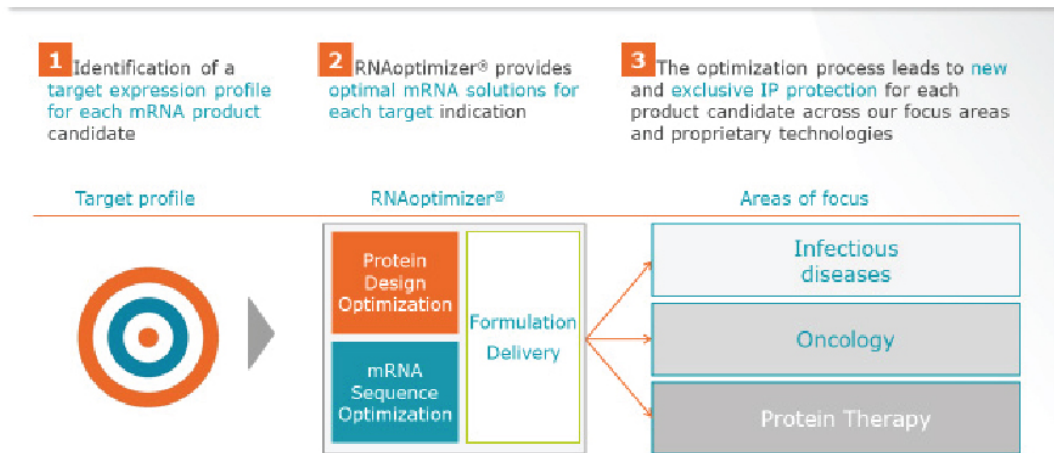
Our Proprietary Technology Platform

The therapeutic potential of mRNAs was discovered by our co-founders in 2000. As the pioneers in the field of mRNA, we have built extensive expertise in mRNA biology, optimization and production. We have developed our proprietary technology platform, called RNAoptimizer, through continued investments over the past 20 years. We believe that we have created the broadest and most versatile platform to develop optimized mRNA-based medicines that has potential to offer differentiated profile in terms of safety, stability and expression.

Our optimization approach covers three pillars: protein design, mRNA optimization and mRNA delivery. Our approach is based on the extensive data libraries we have generated to date. To improve protein expression from *in vitro* produced mRNA, we isolated high numbers of human natural mRNAs from different cells and identified elements which stabilize mRNA in a natural way and improve their interaction with the cellular translation machinery. We continue to invest in all levels of optimization to improve the methods we currently employ and continue advancing mRNA-based medicines.

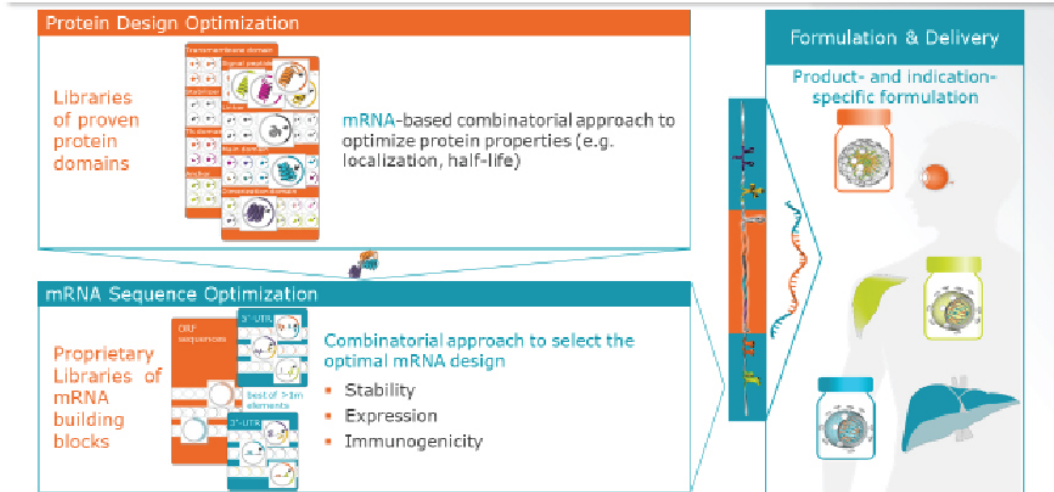
We have a long track record of performing clinical trials with multiple product candidates since 2008. The data generated in these clinical trials has allowed us to better understand the biology of mRNA and to further accelerate development in new therapeutic areas and approaches. We were the first company to demonstrate that mRNA vaccines can induce protective antibody titers in a naïve human subjects with a previous version of our current rabies vaccine product candidate.

Our product candidates consist of two major components: the protein-coding mRNA and a delivery vehicle. Once we have established delivery capability to a target tissue, we can design new product candidates that vary only in the mRNA component, which we expect will allow for rapid target and development candidate identification. We believe that this will enable our platform to be flexible and scalable as we develop additional product candidates.



Our process for creating novel mRNA therapies comprises the following three pillars:

- **Protein Design:** Our goal is to define the amino acid sequence to optimize specific properties of the encoded protein.
- **mRNA Optimization:** Our goal is to define the nucleotide sequence of the mRNA encoding the optimized protein to improve the properties of the mRNA molecule.
- **mRNA Delivery:** Our goal is to define mRNA encapsulation and delivery to select the optimal formulation for each specific indication and tissue.



First Pillar: Protein Design

Proteins play a central role in biology, including formation of the structural framework of the body, aiding in intra- and extracellular transport, biological catalysts (such as enzymes), controlling the activity of cells, and enabling signal transduction throughout the body. Accordingly, mutations that alter the function of a protein that plays a critical role inside the body can disrupt normal development and cause disease. Diseases could be caused by low expression, over expression, or abnormal structures for specific proteins.

We target diseases that are caused by these abnormal or missing proteins. Once our team identifies the protein of interest for a specific vaccine or therapeutic target with a defined target product profile, protein design further improves the potential efficacy by adaptation of the amino acid sequence. Protein design is based on modulation of beneficial protein characteristics that are not present in the naturally occurring protein. We have a library of validated protein domains that can be leveraged using a combinatorial approach to optimize the properties of the target protein.

Our protein design process considers multiple factors before the protein is encoded in the mRNA, including half-life, stabilization of tertiary structure, oligomerization, secretion, and immunogenicity. We have the ability to modify each of these parameters while ensuring that these modifications work in harmony with the required function of the target protein.

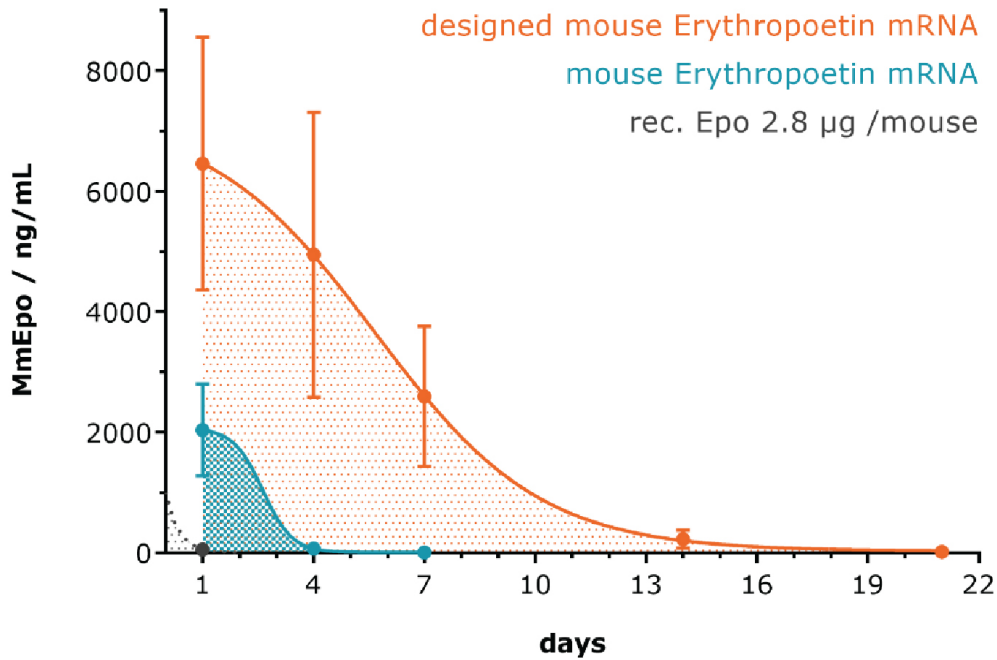
Protein design always depends on the function of the individual protein of interest. The protein can serve as a therapeutic protein without any activation of the immune system or the protein can serve as an antigen with the goal of inducing strong immune responses against it. We employ different optimization strategies to support these distinct functions and requirements. For example, we can enhance certain parameters to extend the half-life or localization of a protein in the case of therapeutic proteins while making sure that RNA sensors remain muted to avoid activation of the immune system. For vaccines, our goal is to induce an optimal immune response mimicking response induced by bacterial or viral infections. Therefore, protein design is always bespoke and multi-factorial to support distinct functions and requirements of the specific target protein.

Below are several specific examples of protein modifications by which we designed a protein's properties relative to the wild type protein:

Extended half-life of secreted protein

This approach relies on the addition of supplementary short domains to the coding sequence of the protein of interest. Although this fusion increases protein size, the additional domains recruit binding proteins already present in blood which promote stabilization of the target protein by preventing proteolytic degradation. To support the efficient persistence of a secreted protein in the bloodstream, we can improve the half-life of this protein by adding specific, endogenous domains. By tailoring the pharmacokinetic profile of secreted proteins, we have the ability to reduce the frequency of dosing, generating a better therapeutic window, and using less material.

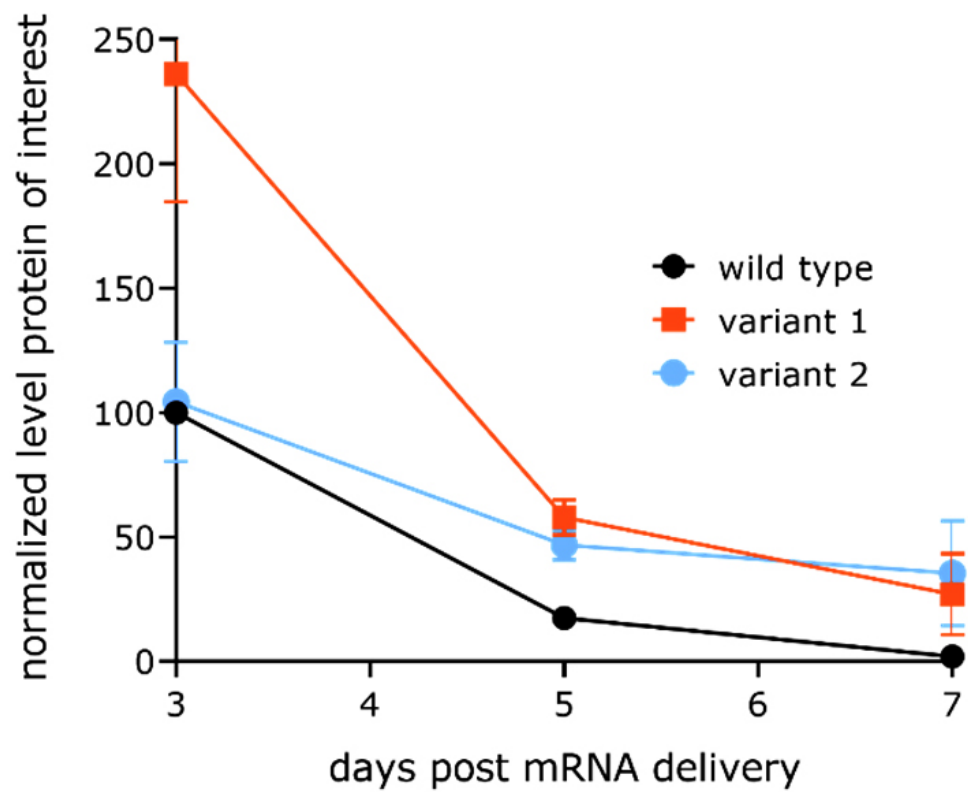
For example, wild type erythropoietin (Epo) is a protein that has a very short half-life of three to four hours in the bloodstream. In a preclinical model, mice were dosed with mouse Epo and protein engineered mouse Epo, both encoded with our optimized mRNA. Dosing with the engineered mouse Epo protein showed an increase in serum titers and pharmacokinetic profile. We were able to increase the half-life and availability of functional Epo in blood from four days to two weeks by fusing endogenous Epo to a selected domain. Notably, both mRNA-encoded Epo proteins showed significantly higher protein expression levels than the injected recombinant Epo, which was cleared from the bloodstream after a single day.



Mice received a single injection in the tail vein of recombinant protein (control) or mRNA encoding proteins. Mice received 2.8 µg of recombinant mouse Epo protein. Wild type Epo encoded by our optimized mRNA and engineered Epo protein encoded by our optimized mRNA were administered at a dose of 0.4 mg/kg giving rise to relevant serum titers of functional Epo and different pharmacokinetic profiles.

Extended half-life of intracellular protein

Similar approaches can also be applied to intracellular proteins, promoting the half-life of functional target proteins. In the example below, protein variant 1 represents the fusion of a protein of interest with a selected protein domain, while variant 2 represents a construct with a single point mutation within the protein of interest. In contrast to the wild type protein, both engineered protein variants enabled the detection of protein even one week after mRNA delivery to hepatocyte cells in culture.



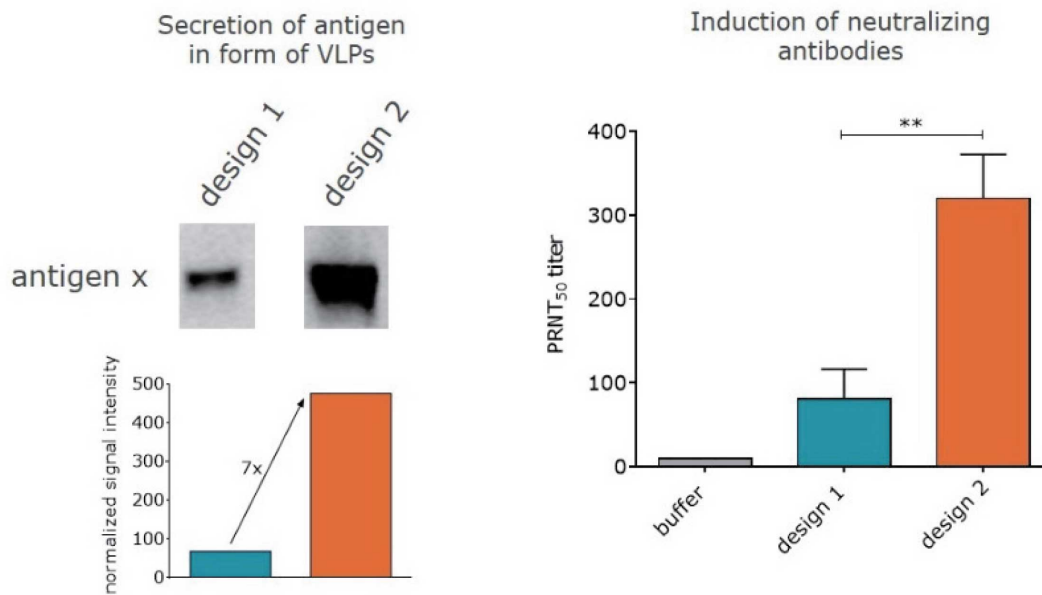
Intracellular abundance of engineered protein variants in comparison to unmodified wild type protein. Protein levels were determined by whole cell Western Blot analysis in human hepatocytes, followed by normalization to signals from a cytosolic loading control and relative to the wild type protein. Same doses used in wild type and engineered protein variants.

Increased oligomerization

Protein oligomerization is a process that converts monomers to macromolecular complexes through polymerization. We can engineer protein oligomerization by adding domains capable to perform

this process to the target protein. As antigens need to be secreted and build clusters to form virus like particles, or VLPs, this oligomerization process is beneficial in boosting the immune response.

Protein design to support VLP formation



Protein sequence of viral antigen was optimized (design 2) by adding an element promoting secretion and clustering of antigen. In the left-hand side of the graphic, secretion of antigen in form of clusters was confirmed by Western Blot analysis of supernatants from transfected human cells. In the right-hand side of the graphic, vaccination of mice with an mRNA vaccine based on this improved protein design resulted in higher immunogenicity, measured by induction of virus neutralizing antibodies.

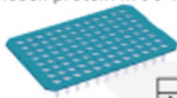
Improved secretion

The potency of secreted target proteins can be improved by using alternative, more powerful signal peptides. These signal peptides are responsible for transporting the target protein from the cytoplasm to the outside of the cell, where the secreted protein fulfills its primary function. We screen large libraries of signal peptides to optimize secretion of any given target protein and in any cell type of choice.

For example, we selected a set of 87 verified signal peptides to maximize secretion. These were combined with the novel target protein via automated cloning to enable facile screening and selection of the most potent product candidate. In the figure below, the top hit from this screen increased the secreted protein levels in primary human muscle cells by three-fold relative to the native signal peptide.

Protein design to improve secretion

1. Automated library cloning of 87 pre-defined Signal Peptides for chosen protein in 96-well format

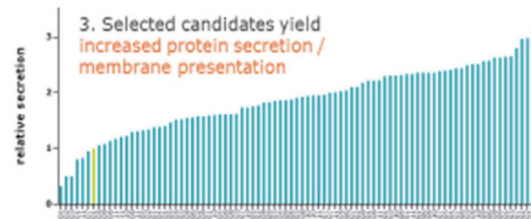
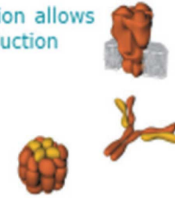


	1	2	3	4	5	6	7	8	9	10	11
A											
B											
C											
D											
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2. *in vitro* screening with highly accurate assay plates allows screening independent plates

Signal Peptide optimization allows enhanced protein production

- Membrane proteins
- Secreted proteins



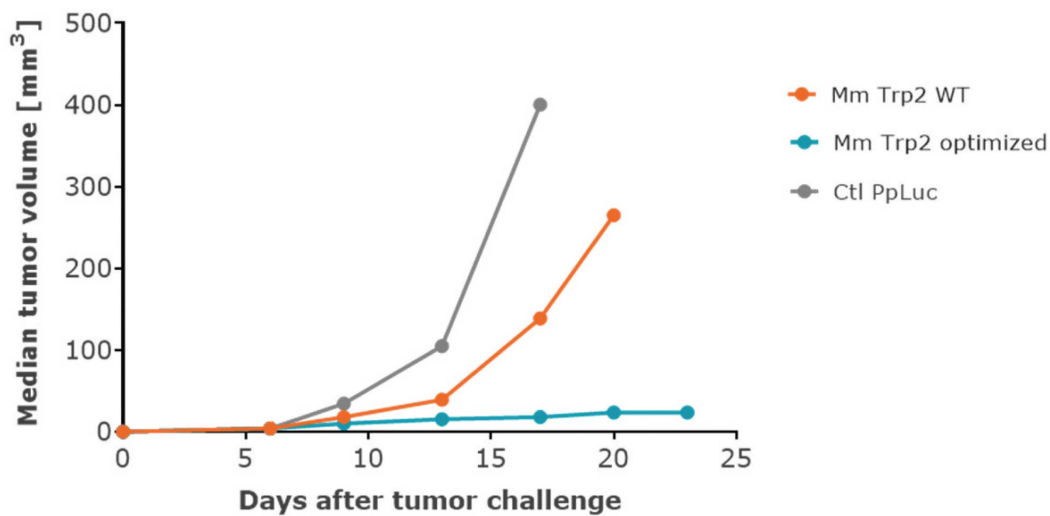
Modified immunogenicity

If the target protein serves as a therapeutic agent, it is important to curb the protein's natural immunogenicity. Our protein design process analyzes and replaces immunogenic epitopes, masking

immunogenic epitopes and thereby rendering the target protein more immunosilent. In contrast, we also have the ability to improve immunogenicity for certain applications (for example in a cancer vaccine) by protein design. These protein sequence adaptations promote immunogenicity and suppress tumor growth in mouse models, as shown in the below example.

Protein design to improve immunogenicity

Inhibition of B16-F10 tumor growth

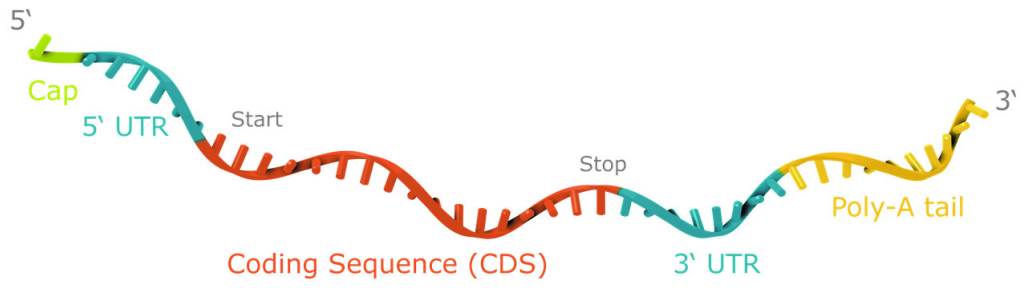


Therapeutic vaccination with mRNA vaccine encoding optimized Trp2 cell antigen inhibited tumor growth in murine melanoma model. Syngeneic mice were challenged subcutaneously with melanoma cells. When tumors were palpable, mice were vaccinated intradermally twice a week with LNP-formulated mRNA encoding either wild-type murine antigen Trp2 or Trp2 designed to improve antigen presentation. Mice vaccinated with LNP-formulated irrelevant mRNA (PpLuc) served as control.

Second Pillar: mRNA Optimization

Overview of mRNA Biology

mRNA is a linear polymer comprised of four monomers called nucleotides: adenosine (A), guanosine (G), cytidine (C), and uridine (U). The sequence at any mRNA's center instructing the synthesis of the protein encoded by it is the open reading frame (ORF, also known as coding sequence). The ORF is a continuous stretch of groups of three nucleotides (called codons) that is decoded and translated into protein by the ribosome. The process of translation begins at the first codon of the ORF, always an AUG (the start codon). The start codon signals to the ribosome where to start protein synthesis. The ribosome then progresses along the ORF one codon at a time, adding the amino acid to the protein chain fitting to the codon. A stop codon at the end of the ORF (UAA, UAG, or UGA) signals to the ribosome to terminate protein synthesis. In every cell, hundreds of thousands of mRNAs are translated into hundreds of millions of proteins every day. A typical protein contains 200-600 amino acids; therefore, a typical mRNA coding region ranges from 600-1,800 nucleotides.



In addition to the coding sequence, mRNAs contain the following elements:

- Untranslated regions, or UTRs — UTRs are sequences that are not translated into protein. The 5' UTR precedes the start codon, the 3' UTR follows the stop codon. These regions play important roles in gene expression including mRNA stability, mRNA localization and translational efficiency via protein-RNA interactions. Some of the elements in the UTRs form characteristic secondary structures that are involved in mRNA regulation.
- 5' cap — The cap structure is required to recruit ribosomes and additional proteins involved in translation to the mRNA.
- 3' polyadenosine, or poly-A, tail — The 3' poly-A tail is a long sequence of adenosine nucleotides (often several hundred) at the 3' end of mRNA. This tail promotes mRNA export from the nucleus and translation, and protects mRNA from degradation. In addition, the 3' end of the mRNA can include a stretch or sequence of nucleotides following the 3' poly-A tail.

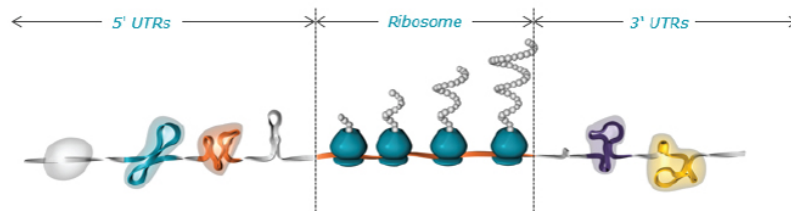
Our Approach

Our mRNA optimization process is designed to generate the most efficacious mRNA for any particular target and indication by optimizing translation, stability and immunogenicity. Each of these parameters can be modified by changing individual mRNA elements and their interplay guided by the envisaged application. Our mRNA molecule contains six elements that can be optimized to improve the potential efficacy of the mRNA construct. These elements include 5' cap, 5' UTR, ORF, 3' UTR, and 3' poly-A tail and 3' end.

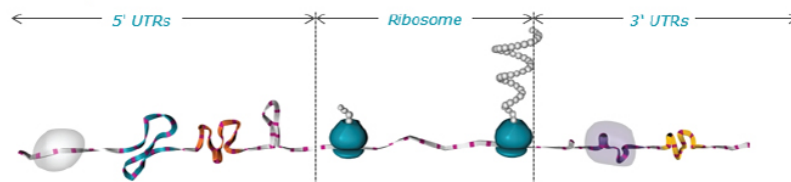
Depending on the target and indication, the required pharmacokinetics of protein expression might be different. Some applications may require the highest possible protein expression but only for a limited time, as is the case for gene editing approaches. For other applications, for example some protein replacement therapies, long-lasting protein expression might be key. Peak level and duration of protein expression can be adjusted by the choice or design of enhancer and stabilizing elements in untranslated regions of mRNA. Each of the mRNA elements together in combination with the overall sequence influence the degree of activation of the immune system by any particular mRNA. Therefore, our approach to RNA optimization always considers multiple factors as well as the whole construct to generate the optimal mRNA.

UTRs contribute decisively to the potential efficacy of therapeutic mRNAs. Natural mRNAs contain several different 5' and 3' UTRs, setting the individual level of translation and stability for each message. We have tapped this natural wealth of regulatory sequences and identified a large set of UTRs that confer translation or mRNA stability via diverse protein-RNA interactions. Producing mRNA *in vitro* using the four natural building blocks of mRNA (adenosine (A), guanosine (G), cytidine (C), and uridine (U)), we find that many of these UTRs retain their favorable properties also in combination with a heterologous ORF, for example in coding for a therapeutic protein of interest. Specifically, with our unmodified mRNA, no additional structural optimization to preserve or restore these critical protein-RNA interactions is required as these are an inherent feature of the natural building blocks we employ.

Our unmodified mRNA

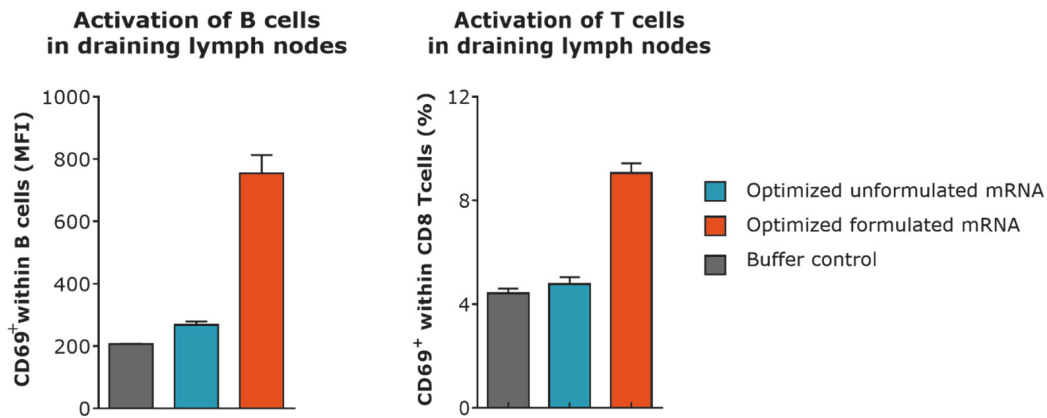


Chemically modified mRNA



With unmodified mRNA, we do not require additional structural optimization to restore protein-RNA interactions. It is an inherent feature of our natural building blocks.

Historically, one factor limiting the use of mRNA as a treatment has been the observation that *in vitro* produced synthetic mRNA activated the innate immune system, resulting in a fast shut down of protein translation in cells. An effective mRNA therapy would need to evade recognition by the immune system to avoid shut down of protein translation. We have accumulated significant knowledge about the signatures recognized by the innate immune system over the past few years. With the insights we have gained, we are able to avoid signatures activating the immune system in elements at our disposal or eliminate them from mRNA constructs. This is demonstrated by the following example where formulated mRNA was injected intradermally in mice and both B-cells and T-cells were activated in the draining lymph node. In contrast, unformulated mRNA injected intradermally had limited immunostimulatory capacity.



10 μg of mRNA, either free or formulated, was administered intradermally to the back of mice. 24 hours post treatment, draining lymph nodes were isolated and the activation status of immune cells was analyzed by flow cytometry. A higher CD69 signal indicates activation of the respective immune cells.

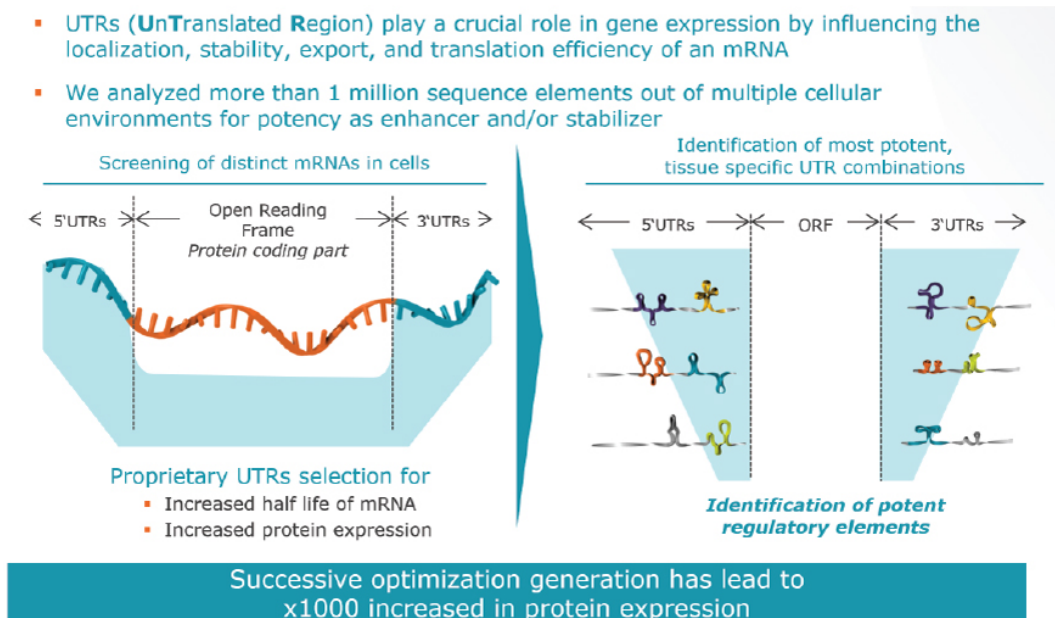
Cap structure

The cap structure influences translation as it recruits the translational machinery including initiation factors and the ribosome. The cap structure also affects mRNA stability due to its influence on the various proteins recruited to mRNA. Further, the cap structure is a determinant of activation of the innate immune system as different cap structures are differentially recognized by several innate immune sensors. In addition, different cap structures are incorporated during *in vitro* production of mRNA with different capping efficiency, resulting in varying proportion of mRNA lacking a cap, which is an mRNA species which

is recognized by yet other sensors of the innate immune system. Accordingly, there is great potential to improve protein expression and immunosilence in mRNA by optimizing the cap structure. We have access to several cap structures, including those we have developed and commercially available ones.

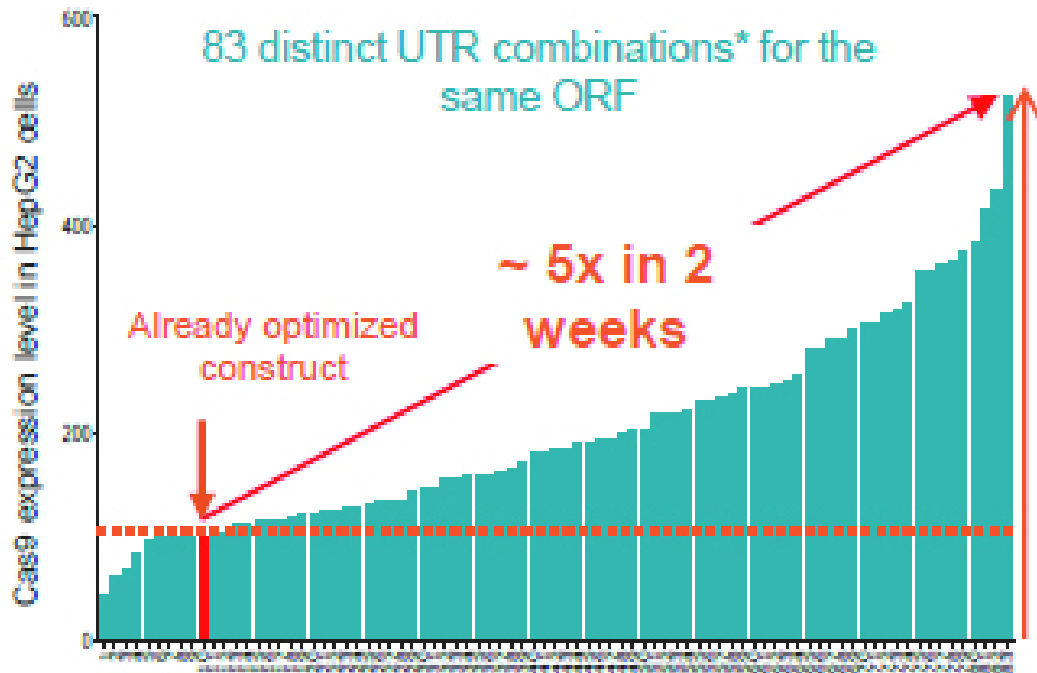
5' and 3' UTRs

We have identified high numbers of naturally occurring 5' and 3' UTRs. Using bioinformatics analysis to identify patterns of increased expression, duration of expression, and reduced immunogenicity, we have catalogued more than one million 5' and 3' UTRs. From these, we selected a large set of potential enhancer elements (improving the rate of protein expression) and stabilizer elements (improving half-life of protein expression). By running a high throughput combinatorial approach, we identify and create optimized UTR combinations for a specific construct. Further, we have created UTR sub-libraries because we discovered that different UTRs perform differently in various tissue types.



Below is an example of the effectiveness of our UTR library to optimize protein expression as part of our collaboration with CRISPR Therapeutics. An open reading frame coding for an optimized Cas9 protein was combined with 83 UTR combinations via automated cloning. This target-specific UTR screening increased Cas9 protein levels in HepG2 cells five-fold compared to an already optimized construct.

Optimized UTRs for higher expression



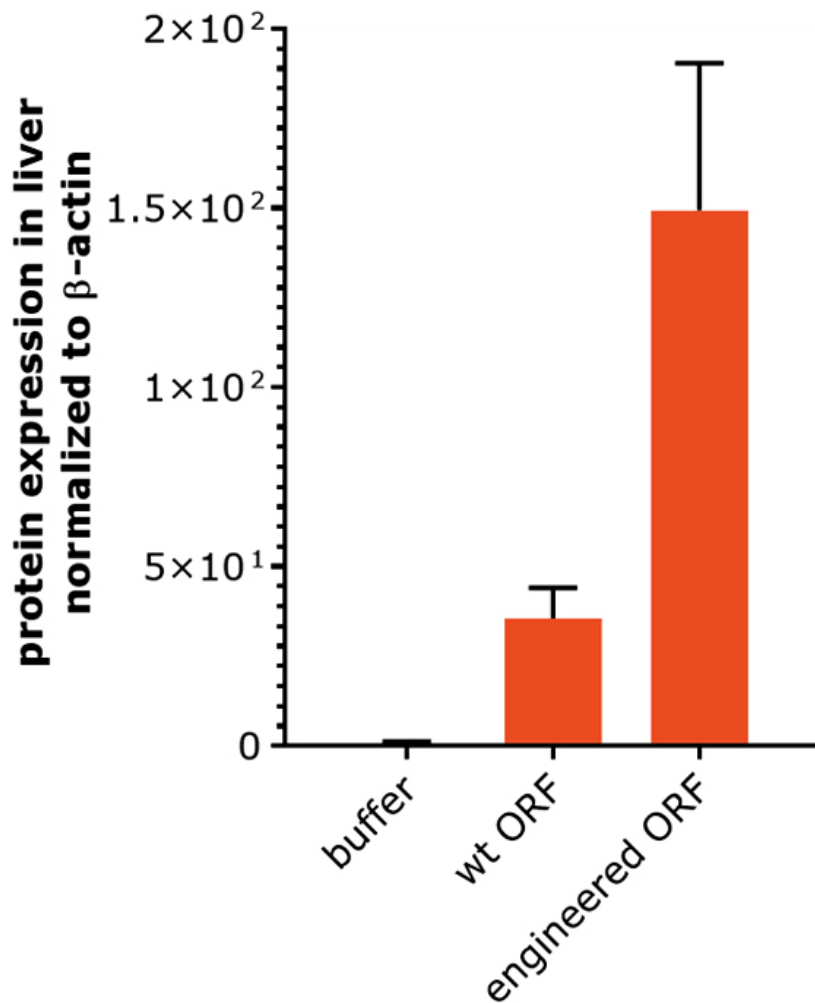
To maximize expression of the target protein a set of 83 combinations of untranslated regions (UTR) was selected from screens identifying stable or highly translated endogenous transcripts. These UTR combinations were combined with the target open reading frame (ORF) via automated cloning to enable facile screening and selection of the most potent product candidates. Target-specific UTR screening led to a five-fold increase in protein levels in HepG2 cells compared to an already optimized construct.

Open reading frame (ORF)

The ORF instructs the synthesis of the protein it encodes by the ribosome. The ORF is a continuous stretch of groups of three nucleotides called codons. Ribosomes decode each codon as an amino acid to be added to the nascent protein. Each codon specifies a particular amino acid, however, many amino acids are specified by more than one codon. Due to this multiplicity of codons that specify an amino acid, any protein can be encoded by a myriad of coding sequences differing in their codon composition. These various ORFs differ largely in their properties and for any particular protein a top performing ORF needs to be identified or designed to make an efficacious mRNA based medicine. We currently optimize the ORF in a broad, holistic approach that includes multiple parameters taking into account codon optimality. Our algorithms also take into account that, similar to UTRs, different codons are optimal for different tissues. Furthermore, these algorithms also analyze and consider secondary structure. For example, as certain elements are known to drive immune stimulation by secondary structure, our algorithms avoid generation of sequences that may give rise to such immune stimulations.

In the following example, protein expressed from our mRNA containing a wild type coding sequence was abundant in the livers of mice injected intravenously with LNP-encapsulated mRNA. However, protein levels were higher from our mRNA containing a coding sequence engineered for maximal protein expression.

Optimized ORF for higher expression

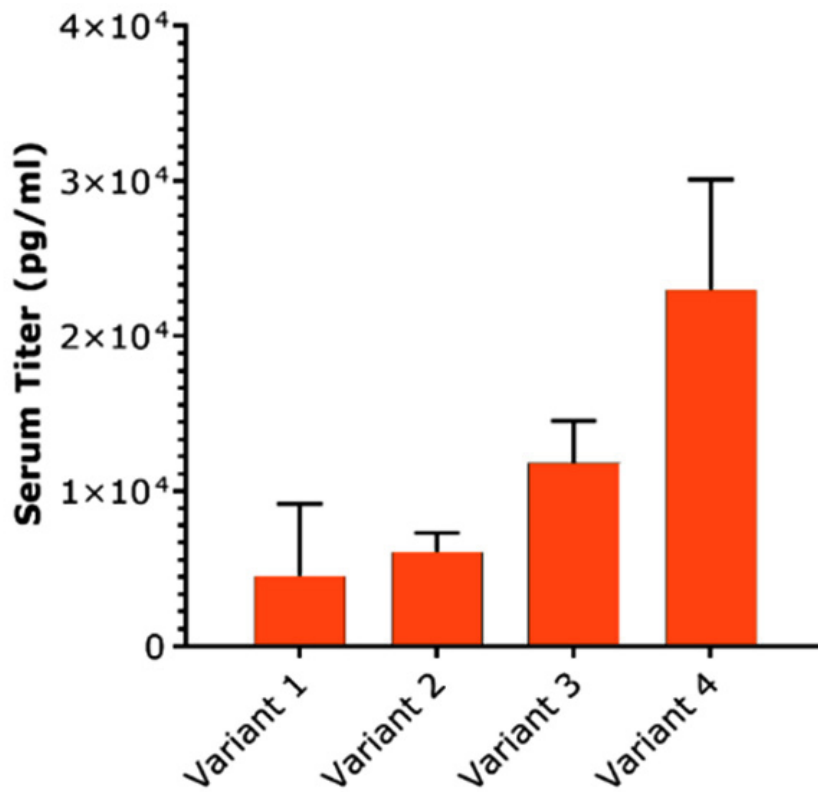


Abundance of a therapeutic protein in mouse liver expressed from an engineered open reading frame (ORF) in comparison to the wild ORF. mRNAs containing ORF variants were formulated in LNPs and injected intravenously into mice (called engineered ORF). Protein levels were determined by Western Blot analysis of liver lysates, followed by normalization to the signal from a loading control.

Poly(A) tail and 3' end

The 3' end of the mRNA molecule, prone to degradation by nucleases, is another form of optimization. The 3' end can be sealed using different stabilizing elements, including secondary structure or specific nucleotide sequences, to inhibit RNA nucleases degrading RNA from the 3' end.

Optimized 3' end for higher expression



Impact of different mRNA 3' end on serum levels of a therapeutic protein. mRNAs containing different vector-encoded 3' end variants were formulated in LNPs and injected intravenously at a dose of 20 μ g into female Balb/c mice. Six hours after injection, serum levels of secreted protein were determined by an enzyme-linked immunosorbent assay test, also referred to as ELISA, to measure antibodies in blood.

Finally, we analyze the structure of the optimized mRNA as a whole including ORF and UTRs to predict its recognition by RNA sensors and immune activating potential and modify any inappropriate elements.

Third Pillar: mRNA Delivery

The potency of the administered mRNA drug product is the combination of the potential efficacy of the mRNA that encodes the protein and the delivery system that transports the mRNA to the cells. Protein levels are highly correlated with the number of transfected cells which requires optimized delivery systems. While it is possible to deliver mRNA directly into the target tissue without delivery systems in certain cases, the presence of RNA degrading enzymes in blood and interstitial fluids rapidly regrade any extracellular mRNA. Additionally, cell membranes act as a significant barrier to entry of large molecules such as mRNA. These delivery technologies enable us to deliver large quantities of mRNA to the target cells.

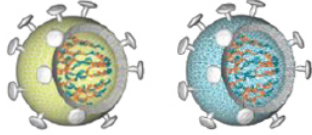
We have access to a diverse portfolio of third-party and proprietary delivery systems that allow us to target a range of diseases. Access to this broad range of delivery technologies allows us to select the best-suited technology for development of each of our product candidates. We choose the most suited delivery system based on a number of factors including immunogenicity, duration of treatment, dose levels, mode of administration and targeted tissue type.

The key delivery systems that we currently employ include:

- Lipid-based delivery systems — We employ lipid nanoparticles (LNPs) to deliver our mRNA-based prophylactic and cancer vaccines locally. For rare disease and antibody therapeutic candidates, we apply LNP-formulated mRNA systemically and deliver mRNA to the liver. We have relied on third-party state of the art LNP delivery systems for our initial clinical programs, and we are developing our proprietary LNP delivery systems for our future clinical programs.
- Polymer-based delivery systems — We employ our novel, proprietary PEGylated polymer system, the CureVac Carrier Molecule (CVCN), to administer therapeutic candidates to such organs as eye and lung. CVCNs are designed to be delivered locally and their administration method may vary (injection, nebulization, among others) due to the robustness of the formulation.

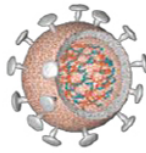
LNPs and CVCN delivery technologies complement each other in their applicability and enable us to cover a greater number of modalities within the mRNA space. With these delivery modalities at hand, we are currently expanding our development pipeline and plan to bring new mRNA therapies to different organs and applications.

Diverse portfolio of delivery systems that can be utilized for different applications



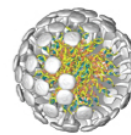
Partners' LNP Technologies

- ✓ State of the art LNP technologies
- ✓ Access to lipid libraries
- ✓ Used in current clinical programs (CV7202 and our SARS-CoV-2 candidates)
- ✓ Systemic delivery to muscle (vaccines)



CureVac LNP Technology

- ✓ Focus on proprietary solutions
- ✓ Expected use in future clinical programs
- ✓ Competitive profile to partner LNPs
- ✓ Delivery to muscle (vaccine) and liver (rare diseases and secreted targets)



CureVac CVCM Technology

- ✓ Polymeric system
- ✓ Low immunogenicity
- ✓ Highly tolerable
- ✓ Local application in tissues where lipids are not ideal (eye, lung, mucosal)

Lipid nanoparticles (LNPs)

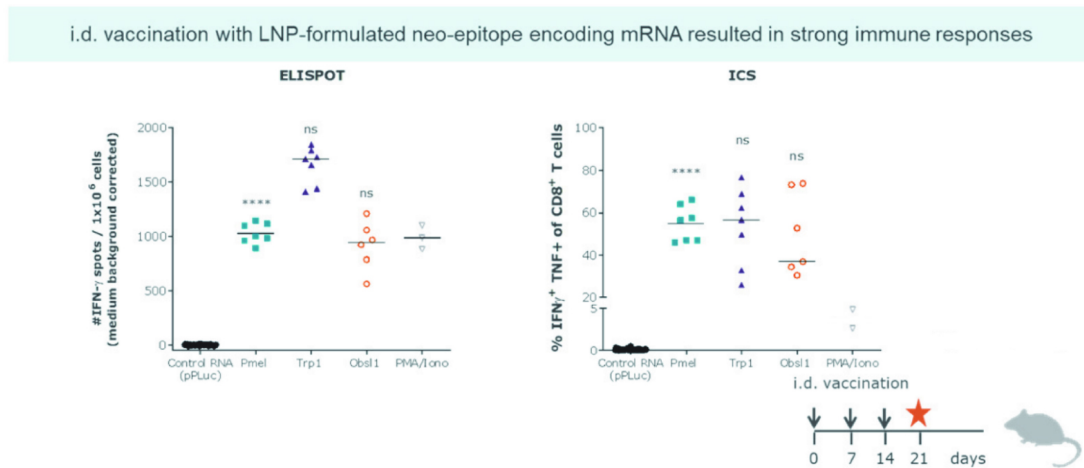
A variety of nanoparticles have been developed over the years for use in drug delivery. LNPs represent the most clinically advanced non-viral delivery systems. Encapsulation of the mRNA within

LNPs enables delivery to the site of action within the cell. LNPs protect the mRNA from degradation, rapid excretion and liver clearance, enabling higher bioavailability and longer half-life.

LNPs consist of different lipids that form together a lipid nanoparticle with a solid core. The four primary LNP components include cationic lipids, pegylated lipids, phospholipids, and cholesterol. LNPs mimic low-density lipoproteins, which allows them to be taken up by an endogenous cellular transport pathway to deliver the mRNA cargo to cells. When LNPs are injected into biological systems, they attach to natural transport proteins, apolipoproteins, to facilitate the transport of lipids within the bloodstream and throughout the body. Following intravenous administration, the apolipoprotein binding enables efficient transport of the mRNA cargo to the liver. Once internalized in endosomes within cells, the LNPs are designed to escape the endosome and release their mRNA cargo into the cytoplasm, where the mRNA can be translated. Any mRNA and LNP components that do not escape the endosome are typically delivered to lysosomes where they are degraded by the natural process of cellular digestion.

The properties of each LNP system can be customized based on altering each component or overall composition. All of the LNPs we employ in our projects are designed to be biodegradable. We have extensively tested over 40 different delivery solutions and have selected the ones we use based on comparative data for the most efficient LNPs available from third parties for licensure. Having access to these technologies enables us to develop fast powerful solutions for vaccines and protein therapy.

Besides the licensed LNP technology from our partners, we are also developing our own LNP technology. We have established two ionizable lipid families and are developing those LNPs for application in local vaccination and systemic delivery to the liver. For local vaccination in skin and muscle, we are currently conducting a systematic screening of LNP components and compositions, optimized exactly for this route. Those adjusted LNP formulations incorporating our own lipids helped to raise significant levels of immune response in epitope based vaccinations.



The graphs above demonstrate the induction of antigen-specific T cell responses after intradermal vaccination of mice with LNP-formulated mRNA encoding for selected neopeptides. Animals vaccinated with LNP-formulated mRNA encoding reporter protein served as negative controls. Stimulation of

splenocytes harvested 7 days post last vaccination with respective peptides demonstrated strong induction of antigen specific T cells in enzyme-linked immune absorbent spot, or Elispot, (depicted in the left hand graph) and Fluorescence-activated cell sorting, or FACs analysis (depicted in the right hand graph).

CureVac Carrier Molecule or CVCM Delivery Technology

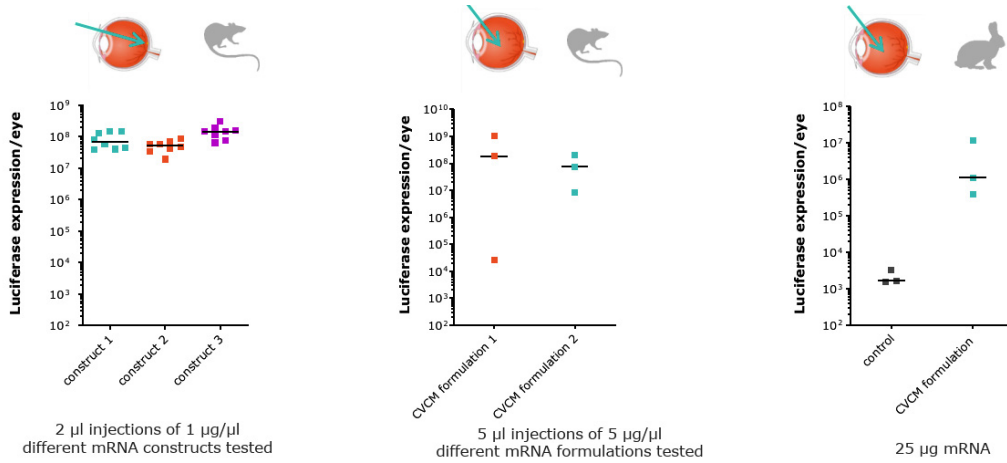
Our proprietary CVCM delivery technology is a polymer based approach for local delivery of mRNA medicines to selected tissues. CVCMs are uptaken via endocytosis and at lower pH during the trafficking, the core peptide and the lipids get protonated. The lipids are then released from the CVCM particles and are inserted into the endosomal membrane, thereby disrupting the membrane. Within the

reducing environment of the cytosol, the CVCMs get destabilized and broken down into its components, resulting in mRNA being efficiently released.

We believe the CVCM delivery technology offers the following key advantages:

- **Stability:** CVCM formulation confers physicochemical stability by design and generates very stable complexes that can survive physical stress. CVCMs can be effectively spray dried, lyophilized, or nebulized, enabling formulation methods that are difficult to achieve with LNPs.
- **Degradation and Excretion:** The human body handles the degradation and excretion of hydrophilic materials very well, without any accumulation in lipid membranes. CVCM polymer is designed and equipped with intrinsic degradation mechanism that enables fast decomposition in the cytosol of cells.
- **Tolerability:** The human body tolerates polymers very well due to the fact that polymers do not disturb the lipid membrane. We have extensively optimized and adapted our CVCM system for mRNA to enable efficient complexation and protection of the mRNA in hostile environments. The excipient to cargo ratio is an important metric that influences the tolerability of delivery systems. For our CVCMs, this excipient to cargo ratio is very low, allowing us to deliver higher amounts of mRNA.
- **Immunogenicity:** Polymeric systems are immunosilent as they do not mimic virus-like particles and do not interact with RNA or lipid sensors.
- **Production of mRNA Therapies:** Polymeric systems tend to be water soluble and enable a homogeneous mixing with the mRNA, thus allowing for less complicated production methods.

The combination of low immune stimulatory capacity and high tolerability makes CVCM formulation highly suitable for sensitive tissues like eye (nerve tissue) and lung (immune sensitive). In preclinical models, CVCM technology enabled high protein in eye (nerve tissue) after intravitreal or sub-retinal administration.



Picture: CVCM nanoparticles mediated protein expression in eye in rats (left panel subretinal injection; middle panel intravitreal injection) and rabbits (right panel intravitreal injection)

The high physicochemical stability during physical stress is also well suited for the administration of CVCM formulation to the lung via the airway. Enabling an administration as an aerosol or as a dry powder formulation.

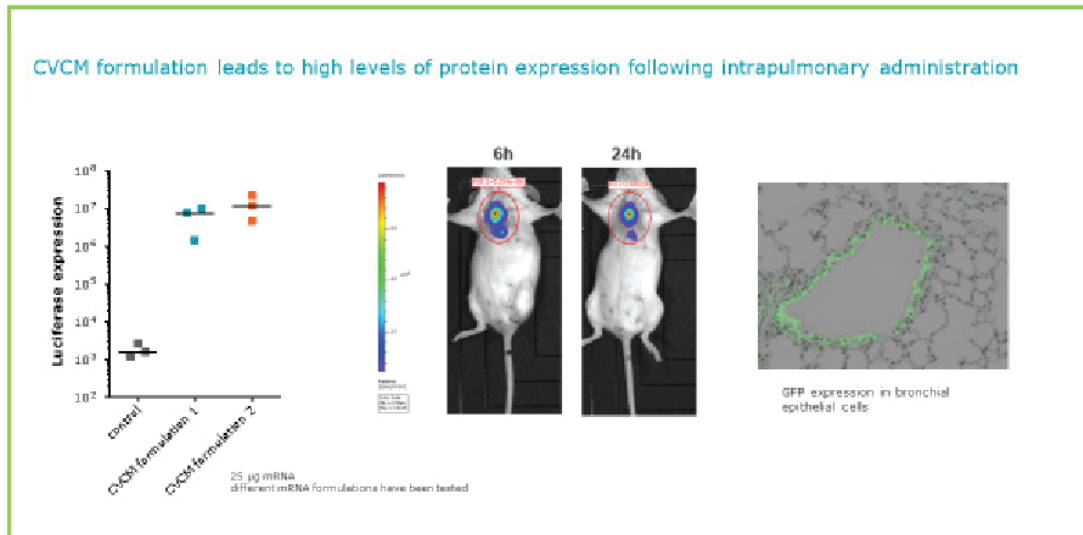


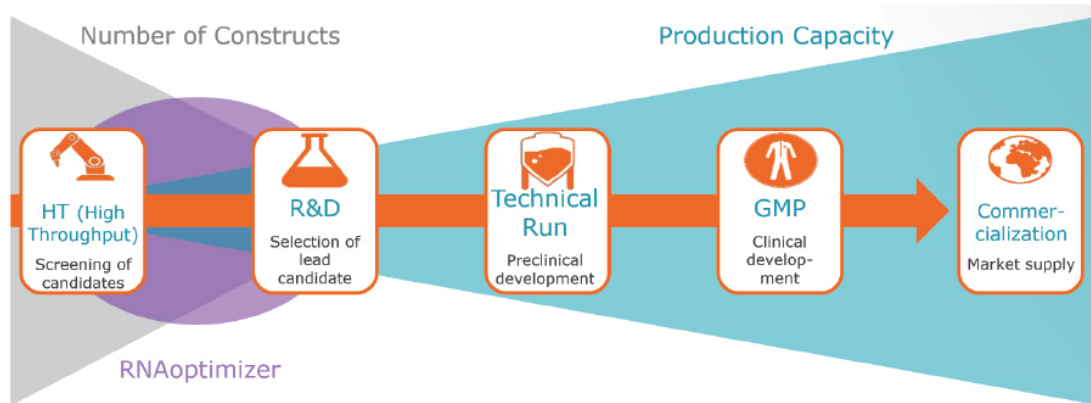
Figure legend: CVCM formulated mRNA, encoding Luciferase was delivered, intratracheal using penncentury device.

Our Manufacturing Platform

We are an integrated biopharmaceutical company with in-house manufacturing capabilities and expertise. We consider our manufacturing process an important part of our strategy that allows us to continuously improve our technology platform and maintain flexibility in clinical development. The close interaction of our technical development and research teams enables us to rapidly implement innovations to the manufacturing process and creates a feedback loop between manufacturing and research. Using this feedback loop, we have created processes and analytics. We control the critical steps of manufacturing in-house, which allows us to drive innovation and to maintain flexibility, and in turn allows us to pivot quickly in pandemic settings such as COVID-19.

All of our mRNA-based active ingredients for various fields of application originate from a common technology platform and are based on identical source materials. This enables us to produce all mRNA therapies using a substantially similar platform process concept. Given the differences in the encoded protein only require alterations of the sequence of the mRNA molecule, leaving its physicochemical characteristics largely unaffected, we can use the same mRNA production strategy applying the same unit operations for diverse products. This allows us to save time and reduce costs compared to other manufacturing processes. Our approach supports a seamless production concept based on our experience and know-how in mRNA manufacturing.

Our GMP Manufacturing Facilities



We have continued to invest significantly in building and expanding our manufacturing capabilities since 2006. We currently have the capacity to produce late stage clinical trial RNA material and early commercial lots. Since 2006, we have manufactured thousands of mRNA constructs, from high throughput and small amounts for discovery and pre-clinical development to GMP level of quality.

We are currently operating three GMP-certified suites. Our GMP I/II facility was designed to run up to 14 different products in parallel, using a lab scale process. The facility covers all steps from starting material pDNA, through mRNA manufacturing to fill and finish. Our GMP I/II facility is dedicated to provide supplies for early clinical development (Phase 1 and 2), with capacity to produce multiple batches per year. In 2019, we expanded our production capacity to meet the increasing demands for clinical studies and future initial commercial supply by adding a GMP III facility. In contrast to the GMP I/II facility, our GMP III facility allows us to achieve additional scale and reduce manufacturing process time. Our GMP III facility focuses on the production of mRNA, and we currently use CMOs for starting material plasmid DNA, or pDNA. We intend to add the formulation step by mid-2021. Our GMP III facility is intended to provide supply for our late-stage clinical studies and initial market supply, and is based on a new scalable process design compared to our GMP I/II facility. We are currently in the process of building a GMP IV facility, which is being designed to cover all manufacturing steps from starting material to formulation, to support our future commercial launches, as shown in the picture below.



GMP IV facility

The RNA Printer

In addition to our GMP manufacturing facilities, we are currently developing a new automated production concept, the RNA Printer. The RNA Printer is a GMP production system that is being designed

to downscale the manufacturing process and automate major manufacturing steps. This fully synthetic production process would allow us to have rapid manufacturing of products and offer reproducibility. It will also include automated cleaning and sanitization in place procedures and continuous process validation. Testing and process development of the first RNA Printer prototype is ongoing. We have successfully manufactured a demonstration batch with the first RNA Printer prototype and are developing a second generation prototype. These new prototypes for DNA and RNA production are being designed to cover automated down- and upstream production up to drug substance.



RNA Printer

The key characteristics of the RNA Printer are rapid throughput, easy operator access to equipment, sophisticated precision control software, and data capture and the small footprint that allows for easy decentralization. With its modular design, it could be used for a rapid first response in outbreak scenarios or even be placed as a stand-alone device for epidemic areas. We view the RNA Printer as complementary to our manufacturing strategy. For example, we expect that the RNA Printer could be deployed to the front lines of pandemic outbreaks complementing our large scale production facilities that can be used to generate supplies to protect the broader population.

Our vision is to have a flexible, mobile and automated end-to-end solution for the different fields of application. Our objective is to cover the entire production stream and we believe efficient accompanying analytics will help to rapidly produce high quality material. All data generated during production would be collected to further improve production processes and product development.

Our Approach to Disease Selection

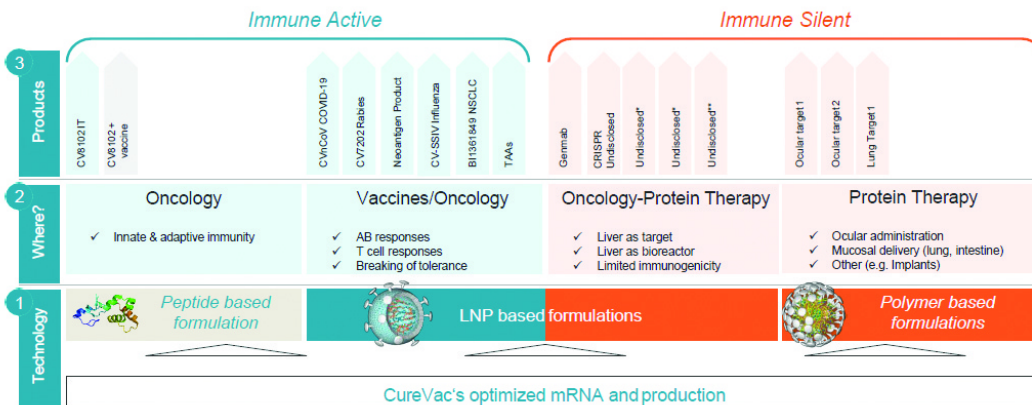
Our approach seeks to mitigate risk across multiple levels to advance and expand our broad product portfolio. While mRNA is still an emerging treatment modality, we believe that we have made advances towards utilizing the potential of our technology platform through rational disease selection. Our approach for selecting new programs is based on the following key factors:

- Target diseases with high unmet medical needs that are not effectively addressed using the current standard of care.

- Target areas where the underlying mode of action of the disease is understood or hypothesized which allows us to identify the required protein(s) or antigen(s).
- Identify areas where mRNA therapies have potential to have differentiated profile compared to the conventional treatment modalities.

- Assess the likelihood of being able to address the disease using our technology platform and seek to continuously improve and expand the capabilities of our platform to address an even broader range of diseases.
- Seek to build on our deep understanding of mRNA biology, data derived from our technology platform and previous clinical and preclinical studies to apply to new indications.

In building our product portfolio, we have considered a number of factors including immune response, duration of expression, dosing requirements, delivery technology, target tissue type, potential for responsiveness to mRNA based medicine, and target disease profile, among other factors. A disease indication may require a mRNA based medicine that triggers an immune response, or that is immune active, or a mRNA based medicine that requires no immune activation, or that is immune silent. Each of the disease indications that we are targeting require different levels of immune activation for the mRNA based medicine to be effective. Our approach is to initially target indications that require an immune active approach (such as prophylactic vaccines), given the need for lower doses and transient expression of the antigen. These initial indications are amenable to localized delivery using an LNP delivery system. Following the proof of concept observed in preclinical studies from our prophylactic vaccines program and our advanced understanding of mRNA biology and immune stimulation modulation, we have expanded our product portfolio to target indications that require an immune silent approach (such as protein delivery). Targeting diseases amenable to the immune silent approach requires higher doses and longer expression of the protein, with potential for long-term repeat dosing for chronic diseases. By using both LNP and our proprietary CVCM delivery systems, we are able to address a broad range of target tissue types.



We are able to explore the full potential of mRNA product candidates via two main approaches:

- **Immune active.** For indications that require immune stimulation such as prophylactic and therapeutic vaccines, our technology optimizes the combination of mRNA molecules encoding specific antigens and selected delivery modalities to provide the desired immunostimulatory capacity. This allows us to design vaccines with high immunogenic effect. The goal is to induce

an immune response against the encoded antigen. The mRNA is taken up by cells, including dendritic cells, at the injection site. Expressed antigens are then presented to the adaptive immune system leading to selective activation of T cells and B cells that recognize these antigens. These activated adaptive immune cells can then recognize and attack similar antigens that are found on tumors or pathogens.

- **Immune silent.** For indications that require no immune stimulation such as protein delivery, our technology can also design product candidates to be immuno-silent and to express encoded proteins over an extended period of time. These product candidates can be expressed either locally (eye or lung) or systemically, using the liver as a bioreactor for production of the therapeutic proteins (enzymes and antibodies).

Oncology

mRNA is a versatile platform for cancer vaccine development allowing to encode a wide range of antigens from full length tumor associated antigens to neoepitopes. We are taking multiple approaches in oncology to induce tumor specific immune responses in patients:

- **Intratumoral therapy:** Intratumoral injection of immunostimulating agents into tumors is an alternative to classic vaccination to induce a therapeutic immune response. High concentration of such agents can be achieved by local administration in the tumor tissue with little systemic side effects. Intratumoral immunotherapy activates antigen-presenting cells in the tumor environment and draining lymph nodes to present a broad panel of antigens expressed by the tumor to T and B cells and induce a systemic immune response against the injected tumor as well as non-injected metastatic lesions (abscopal effect).

Our lead oncology product candidate, CV8102, is based on a complex of single stranded non-coding RNA with a polymeric peptide carrier which has been shown to activate the TLR7, TLR8, and RIG-I pathways. These pathways activate the innate immune system upon detection of RNA molecule. We are currently evaluating CV8102 in a Phase 1 clinical trial for the treatment of four types of solid tumors. We are also investigating mRNAs encoding immunostimulating proteins for intratumoral therapy. We have shown in several animal models that intratumoral injection of mRNA encoding immunostimulating proteins, such as cytokines, can induce regression of the injected tumors and prolong survival of the animals. We are testing different mRNA constructs and formulations in preclinical studies to achieve optimal expression of proteins in the tumor. We are also exploring combinations of mRNA encoding different immunostimulating proteins in order to demonstrate optimal therapeutic level in tumor models that are refractory to immunotherapies like anti-PD-1 agents.

- **Novel cancer vaccines:** We are also working on discovery of novel vaccines against tumor-associated antigens, which are antigens that are overexpressed in tumor tissues with no or little expression on healthy tissues, using our LNP formulations. It is known that these antigens are often less immunogenic than neoantigens and require optimized design to improve their presentation to immune cells as well vaccine formulation with strong immunostimulating properties (vaccine adjuvant effect) to enable the induction of relevant immune responses.

We have demonstrated in a preclinical model that an optimized LNP formulated mRNA vaccine, encoding a TAA, that is also a self-antigen, can induce cellular and anti-tumoral immune responses and single agent therapeutic activity. These immune responses led to single agent therapeutic effect in the B16F10 tumor model that does not respond to anti-PD-1 antibodies alone. The therapeutic effect of the vaccine was further enhanced by concomitant systemic anti-PD-1 antibody treatment. Based on these encouraging data, we are developing vaccine candidates targeting tumor associated antigens for different indications. We aim to focus on indications and settings with a high medical need showing a low response rate to anti-PD-1 antibodies alone or indications with minimal residual disease after standard of care surgery (adjuvant setting) and aim to use the vaccines to prevent cancer relapse.

We are also developing novel vaccine targeting a number of neoantigens. We have demonstrated that LNP formulated mRNA vaccines encoding are also able to induce T cell responses against model neoantigens.

Prophylactic Vaccines

Similar to the proteins expressed on cancer cells, infectious disease-related proteins, such as viral surface proteins, specific target for the body's immune defense system can be expressed by injected mRNA and then presented to B- and differentiated T- cells, activating a specific immune response. We believe that our mRNA technology offers a platform for the development and production of prophylactic vaccines against infectious diseases. We believe our mRNA vaccines offer many potential advantages over existing vaccine technologies, including:

- mRNA vaccines mimic several aspects of a natural viral infection and has the potential to offer improved and balanced immune response.
- mRNAs allow us to encode for specific protein antigens of choice, offering potential for the development against known and yet unidentified pathogenic threats.
- mRNAs allow production of multivalent vaccines with the potential to either demonstrate a broader efficacy by including additional target pathogens, or to strengthen potential efficacy by better targeting a specific pathogen, for example by adding of immunogenic epitopes, or both.
- mRNA vaccines are generally expected to be safer than live or attenuated vaccines since no living virus is injected. As they do not interact with the host-cell DNA, they avoid the potential risk of genomic integration posed by DNA-based vaccines.
- mRNA binds to pattern recognition receptors and mRNA vaccines are thereby self-adjuvanting, a property which peptide- and protein-based vaccines lack.
- Rapid speed of development from knowing the sequence of the virus to progressing programs in clinical development given our ability to produce antigens without dedicated cell cultures and fermentation-based manufacturing processes.
- Commercial scale production of mRNA is fast, cost-effective and, in contrast to traditional vaccine approaches, does not require cell culture or the use of live pathogens and as a result, multiple vaccines can be produced in the same plant.

Our current approach to the development of potential prophylactic vaccines is focused on:

- **CV7202 for rabies:** Our most advanced program, CV7202, is a rabies vaccine candidate currently in a Phase 1 clinical trial. CV7202 induced adaptive immune response as shown by rabies-specific VNTs above the WHO thresholds considered to be protective, 28 days after the second dose in all subjects, at the lowest 1µg and 2µg dose levels.
- **SARS-CoV-2 vaccine:** Our mRNA vaccine program against SARS-CoV-2 is currently in Phase 1 clinical studies. Our preclinical studies showed a fast induction of a balanced immune response in mice with high levels of VNTs and T-cell responses at a low dose (2µg). We believe that VNTs provide evidence supporting the potential of our vaccine candidate to induce a strong immunologic response to neutralize SARS-CoV-2.
- **CV-SSIV for influenza:** As part of our influenza program, we have evaluated mRNA-based influenza vaccines starting with a monovalent influenza vaccine followed by seasonal cocktails based on influenza hemagglutinin, or influenza HA. In preclinical studies, we demonstrated that the multivalent mRNA vaccines induced hemagglutination inhibition, or HI, titers above the accepted threshold for protective immunity in ferrets and non-human primates, or NHPs.
- **Respiratory Syncytial Virus, or RSV vaccine:** Our approach for the RSV program is based on delivering mRNAs encoding for the RSV F (fusion) protein. Based on *in vivo* challenge studies in cotton rat, we have demonstrated that our mRNA vaccines induce high levels of virus neutralizing antibodies, protect animals against RSV infection, without any signs of lung pathology.
- **Other prophylactic vaccines:** In partnership with the Bill & Melinda Gates Foundation, we are developing prophylactic vaccines for prevention of other infectious diseases associated with high mortality in the developing world including malaria and rotavirus.

Protein therapy: Deliver mRNA to express the right protein wherever needed

We are seeking to optimize mRNA molecules to trigger production of antibodies. Our antibody work has potential to protect against viruses and toxins and can be applied in many disease indications including cancer, cardiovascular diseases, infectious diseases and autoimmune diseases. In preclinical studies in non-human primates, we have demonstrated that antibodies encoded by mRNA can be produced in hepatocytes very rapidly and can reach in the blood stream at relevant therapeutic levels.

With our technology, we can instruct human cells to produce specific proteins in the nucleus, cytoplasm, cellular organelles, cell membrane, or get them secreted. Based on this “healthy” information delivered by mRNA, our cells are designed to produce proteins, which are required to treat the disease caused by missing or inactive proteins.

We believe there are several advantages of our technology applied to development of protein therapy, including:

- mRNA encoded proteins can function within or outside of cells as well as inside cell membranes, allowing us to address intracellular protein deficiencies that are not addressed by recombinant proteins.
- mRNAs can enable production of complex proteins that are challenging to make using recombinant technologies due to their folding requirements and complexity.
- Administered mRNAs encode proteins using natural pathways allowing for post-translational modifications such as glycosylation whereas recombinant proteins use non-human post-translational modifications which may lead to lower effectiveness and increased immunogenicity.
- mRNA constructs can be optimized to produce proteins that offer desirable pharmacology relative to the wild type protein, such as increased half-life.
- mRNA allows for dosing flexibility to meet patient needs without causing irreversible changes to the genome.
- mRNA can be delivered repeatedly, creating the opportunity to provide long-term benefit for treatment of chronic diseases.

Our current approach to the development of protein therapies is focused on:

- **Liver and Rare diseases:** We are currently developing multiple undisclosed programs focused on liver-specific metabolic disorders. The goal of these programs is to restore the specific enzyme or protein that is deficient in the liver by LNP-mediated delivery of mRNA to the liver. As such, the target organ for correction is the liver, and secretion and systemic distribution of the enzyme or protein to other organs is not required for a therapeutic effect. We have shown initial proof of concept in a knockout mice model for hereditary spastic paraplegia type 5 (SPG5), where we demonstrated a significant reduction in oxysterols in serum, liver and brain. We are applying this approach for delivery of liver-specific protein factors, which we believe can resolve liver fibrosis, a key pathological feature of NAFLD, NASH, cirrhosis and hepatocellular carcinoma. In addition, we have conducted preclinical studies in undisclosed lysosomal storage disorder using liver as a bioreactor.
- **Therapeutic antibodies:** We are also developing mRNAs therapies to produce antibodies systemically using the liver as a bioreactor for subsequent secretion and systemic distribution of the antibodies to primary organs affected by a disease. Our collaboration with Genmab, a global leader in antibody discovery and design, will allow us to work with novel antibodies produced using our mRNA technology. This partnership represents the first-ever publicly disclosed mRNA antibody focused deal and will allow us to optimize and manufacture mRNA encoded antibodies for Genmab.
- **Eye diseases:** Using our CVCM delivery system that enables different routes of delivery to the eye, we are investigating development of mRNA-based treatments for undisclosed ophthalmic indications. We have a collaboration with SERI for our discovery efforts.
- **Lung diseases:** The CVCM delivery system is also well suited for delivery of mRNA to the lung, administered as either an aerosol or a dry powder formulation. Proof of concept *in vivo* animal studies showed that CVCM mRNA formulations, administered using the intrapulmonary route, were able to transfect airway epithelial cells and produce functional therapeutic proteins in the lung. We have a collaboration with Yale University focused on discovery of novel molecular targets in pulmonary diseases.

Our Key Pipeline Candidates

CV8102

CV8102 is the first compound we are developing for treatment of various solid tumors using an intratumoral approach. CV8102 is based on a complex of single stranded non-coding RNA with a polymeric peptide that binds and coats the RNA, protecting it from rapid degradation while also helping to stimulate the immune system.

CV8102 was shown to activate cellular receptors that normally detect viral pathogens entering the cells (such as TLR7, TLR8, and RIG-I pathways). By mimicking a viral infection at the injection site, CV8102 is designed to induce an inflammation that can activate the immune system to reject the tumor. CV8102 was initially developed as a vaccine adjuvant and was shown to enhance the induction of multifunctional CD8 T cell responses and therapeutic activity of peptide vaccines against cancer in preclinical models.

CV8102 is currently in a Phase 1 clinical trial for the intratumoral treatment of four types of solid tumors — cutaneous melanoma, or cMEL, adenoidcystic carcinoma, or ACC, and squamous cell carcinoma of skin, or SCC, as well as squamous cell carcinoma of head and neck, or HNSCC.

As of April 2020, we have enrolled 40 patients (24 in the single agent cohort and 16 in the combination cohort) in the Phase 1 dose-escalation portion of the study. Intratumoral CV8102 was observed to be tolerated without dose limiting toxicities, or DLTs, at dose levels up to 600 µg (single agent) and 450 µg (anti-PD-1 combination) and dose escalation continues.

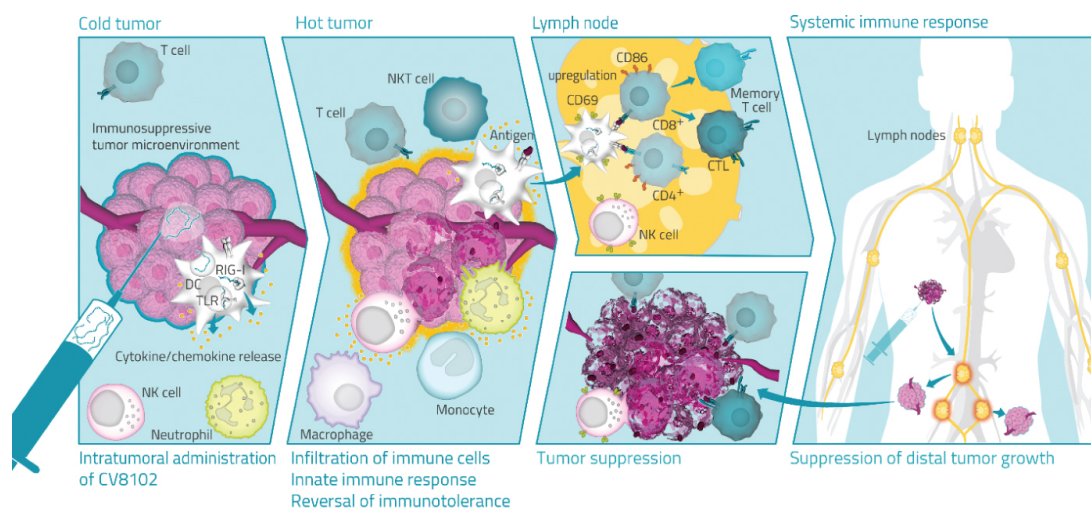
We have observed preliminary evidence of single agent activity with objective tumor responses (1 complete response, or CR, and 1 partial response, or PR, according to RECIST 1.1.) in two melanoma patients. Two additional patients have shown a stabilization of their disease, including shrinkage of non-injected lesions.

Based on clinical data from the ongoing Phase 1 portion of the trial, further clinical development of CV8102 will continue after selection of a recommended Phase 2 dose. We plan to further investigate safety, biological effects and clinical efficacy of this dose in an expansion part of the trial.

Currently, expansion cohorts of 20 to 40 patients per indication are planned and will include combination with anti-PD-1 antibodies in PD-1 naïve and refractory patient populations. In selected sub-cohorts assessment of mandatory tumor biopsies is planned to elucidate the mechanism of action and help to predict which patients may be more responsive to the treatment.

Mechanism of Action

CV8102 is designed to activate cellular receptors that normally detect viral pathogens entering the cells (such as TLR7, TLR8 and RIG-I pathways) mimicking a viral infection of the tumor. CV8102 is designed to recruit and activate antigen-presenting cells at the site of injection to present tumor antigens released from tumor cells to T cells in the draining lymph node. This potentially leads to activation of tumor-specific T cells, which can kill tumor cells at the injected site, but also at distant non-injected tumor lesions or metastases. Activation of other immune cells like natural killer, or NK, cells at the site of injection may also contribute to the antitumor effect. This mechanism of action is illustrated in the figure below.



In preclinical models, CV8102 was shown to initially activate the innate immune system at the site of injection and the draining lymph node based on increase in number or activation of NK cells, monocytes and plasmacytoid dendritic cells. There was also an increased expression of genes associated with T-cell mediated cytotoxicity. These effects were enhanced by concomitant treatment with anti-PD-1 antibodies which also led to increased tumor infiltration by CD8⁺-T cells.

Market Opportunity

CV8102 is currently being developed against four types of cancers, each frequently exhibiting easily accessible superficial tumor lesions:

- cMEL is an aggressive form of cancer that starts in the pigment-producing cells of the skin and can spread widely to other parts of the body. Cutaneous melanoma accounts for the majority of skin cancer-related deaths in the United States. In 2018, there were approximately 300,000 new cases of cutaneous melanoma and approximately 60,000 deaths worldwide. In the United States, the National Institute of Health, or NIH, estimates approximately 100,000 new diagnoses of cutaneous melanoma and approximately 7,000 deaths in 2020. According to the National Comprehensive Cancer Network, or NCCN, guidelines, while surgical removal of the tumor is the primary treatment for localized melanoma, for patients with metastatic disease, chemotherapy and targeted therapies including the BRAF inhibitors are also recommended. Based on published literature, the majority of patients treated with BRAF inhibitors develop secondary resistance within a relatively short amount of time. Checkpoint inhibitors are recommended as the first-line treatment for advanced / unresectable metastatic melanoma, but their side effects are severe and a significant subset of patients (approximately 40% to 45%) do not respond to these drugs and many of those who do respond (approximately 30% to 40%), develop secondary resistance. There are very limited therapeutic options for patients who have failed anti-PD-1 and targeted therapy (if eligible). Intralesional oncolytic virus therapy, or Tvec, is considered for selected cases, but its use is mostly limited to metastatic stage IIIc or M1A disease.

- HNSCC occurs in the outermost surface of the skin or certain tissues within the head and neck region including the throat, mouth, sinuses and nose. Squamous cell carcinoma makes up about 90% of all head and neck cancers. Consumption of tobacco products and alcohol and having a poor diet are important risk factors. HNSCC is the seventh leading cause of cancer-related mortality: in 2018, an estimated approximately 700,000 people were diagnosed with HNSCC worldwide, with approximately 350,000 deaths. In the United States, according to American Society of Clinical Oncology, or ASCO, approximately 65,000 new cases are diagnosed annually and more than 14,500 deaths are reported every year. Published literature indicates that more than two-thirds of patients with HNSCC initially present with locoregionally advanced disease (stage III-IV). HNSCC treatment typically involves a combination of chemotherapy, radiation and surgery. According to the Cancer Network and published literature, for patients with early-stage

disease, these treatment approaches lead to approximately 60% to 80% response rate. The 5-year progression-free survival, or PFS, rate of advanced HNSCC has continued to remain at 40% to 50% and the average time to relapse is less than 2 years regardless of the combination of various treatment modalities. In patients with advanced disease, more than 50% develop local or regional recurrence and nearly 30% develop distant metastases. Based on the NCCN, the recommended first line treatment for recurrent/metastatic HNSCC include chemotherapy combinations with Cetuximab and anti-PD-1 antibody treatment with or without platinum based chemotherapy. We believe based on publications and our analysis that the typical response rate to anti-PD-1 antibodies in patients with HNSCC is below 20%, and that there is still a significant unmet need.

- ACC is an uncommon form of malignant neoplasm that arises within secretory glands, most commonly the major and minor salivary glands of the head and neck. Other sites of origin include the trachea, lacrimal gland, breast, skin and vulva. ACC accounts for around 10% of all salivary gland neoplasms, 22% of all salivary gland malignancies and about 1% of all head and neck malignancies. The National Cancer Institute, or NCI, estimates that 1,200 patients are diagnosed annually in the United States with ACC and 15,000 patients are affected. Globally, ACC incidence rate is estimated between 0.4 to 13.5 cases per 100,000 annually. The primary treatment of ACC is surgery, which is usually followed by post-operative radiotherapy. According to the American Society of Clinical Oncology, or ASCO, while the 5-year survival of ACC is 89%, 15-year survival is only approximately 40%. For patients with recurrent or advanced/metastatic disease not amenable to curative intent surgery there is no approved systemic standard treatment. There are minimal options for treatment of advanced ACC, traditional chemotherapy has been proven to be of minimal benefit, so patients often seek clinical trials as a second line option, leading to a high unmet medical need.
- SCC is the second most common form of skin cancer that develops in the squamous cells that make up the middle and outer layers of the skin. While not life-threatening, it can be aggressive and can spread to the other parts of the body, causing serious complications. According to ASCO, in the United States, out of 5.4 million skin cancer cases, 20% are SCC. According to published literature, global incidence varies widely with highest incidence reported in Australia and lowest rates reported in Africa. Given most countries do not have cancer registries for skin cancer, figures reported are likely underestimated. Although most SCC are localized and easily treated, approximately 5% of patients experience local recurrence, approximately 4% develop nodal metastases and approximately 2% die of the disease. According to NCCN, most SCC are managed through different surgical methods, along with topical therapy, cryotherapy and photodynamic therapy. Surgical methods usually lead to good prognosis and cure rates greater than 90%. In rare case of metastases, radiation therapy, immunotherapy and/or chemotherapy are deployed. Despite the available treatments, 10-year survival rate is less than 20% in patients with locoregional lymph node metastases and less than 10% in the presence of distance metastases, leading to a significant clinical unmet need.

Phase 1 Clinical Trial of Intratumoral CV8102

We initiated a Phase 1 clinical trial of CV8102 for the treatment of various solid tumors in 2017.

The Phase 1 clinical trial is evaluating intratumoral administration of CV8102 in patients with advanced melanoma, squamous cell carcinoma of the skin, squamous cell carcinoma of the head and neck, or adenoid cystic carcinoma. Patients receive CV8102 as single agent or in combination with anti-PD-1 therapy. Patients with advanced inoperable melanoma, cutaneous or head and neck squamous cell or adenoid cystic carcinoma are eligible for single agent CV8102, and patients with advanced inoperable melanoma and head and neck squamous cell carcinoma indicated for anti-PD-1 therapy or who did not respond or slowly progressed on anti-PD-1 therapy are eligible for the combination. CV8102 is administered for up to eight intratumoral injections into a single accessible tumor lesion over a 12-week period.

The objectives of this clinical trial include to define the maximum tolerated dose and recommended dose for CV8102 alone and in combination with an anti-PD-1 therapy, and to evaluate safety and tolerability

of CV8102 administered alone and in combination with an anti-PD-1 therapy. Secondary endpoints include anti-tumor activity analyses and tumor response assessment.

Key Inclusion Criteria:

- Patients enrolled into single agent CV8102 dose escalation cohorts must have:
 - histologically confirmed advanced cMEL, SCC, HNSCC or ACC with documented disease progression;
 - not amenable to resection or locoregional radiation therapy with curative intent; and
 - at least 1 line of anti-cancer therapy for advanced disease (except adenoid cystic carcinoma).
- Patients enrolled CV8102 anti-PD-1 combination cohort must have:
 - histologically confirmed advanced cMEL or HNSCC; and
 - indication for anti-PD-1 therapy or currently receiving anti-PD-1 therapy with stable or slowly progressing disease after at least 8 weeks (HNSCC) or 12 weeks (cMEL) of anti-PD-1.
- Presence of at least one injectable lesion that is measurable according to RECIST 1.1 criteria.
- Recovered from prior relevant toxicities to grade \leq 1.
- ECOG PS 0 or 1, 18 years of age or older.

Key Exclusion Criteria:

- Rapidly progressing multi-focal metastatic or acutely life threatening disease;
- Prior use of topical/local TLR-7/8 agonists within the past 6 months;
- Prior anti-cancer therapy administered 2-4 weeks prior to the first dose of study drug depending on the indication;
- Lesions that are to be injected in previously irradiated areas unless progressive tumor growth has been demonstrated (no prior irradiation of injected lesions on patients with melanoma); or
- Treatment with any investigational anticancer agent within 4 weeks prior to the first dose of study drug.

Primary Objectives:

- Determine maximum tolerated dose, or MTD, based on occurrence of DLTs within 2 weeks after the first dose and recommended dose, or RD, respectively, for CV8102 alone and in with anti-PD-1 therapy.
- Tolerability and safety of CV8102 alone and in combination with anti-PD-1 therapy

Secondary Endpoints:

- Evaluate anti-tumor activity of CV8102 alone and in combination with anti PD-1 antibodies per RECIST 1.1 and irRECIST criteria.
- Evaluate duration of response, progression free survival and disease control rate at 6 months.
- Evaluate tumor response of injected and non-injected lesions.
- Evaluate survival time.

Exploratory Endpoints:

- Evaluate effects on immune parameters and other biomarkers of interest in the peripheral blood.
- Evaluate effects on immune cell infiltration and other biomarkers of interest in tumor biopsy specimen (in selected cohorts during the expansion phase).

Preliminary Patient Demographics

As of April 2020, 40 patients were enrolled in the clinical trial: 24 in the single agent cohort and 16 in the combination cohort with anti-PD-1 antibodies. In the single agent cohorts, 42% of patients had melanoma, 17% HNSCC, 13% SCC and 29% ACC. 54% of patients were pre-treated with anti-PD-1 antibodies and 8% with anti CTLA-4 antibodies.

In the combination cohort, 88% of patients had cMEL and 13% had HNSCC. 88% were pre-treated with anti-PD-1 antibodies and 50% with anti CTLA-4 antibodies.

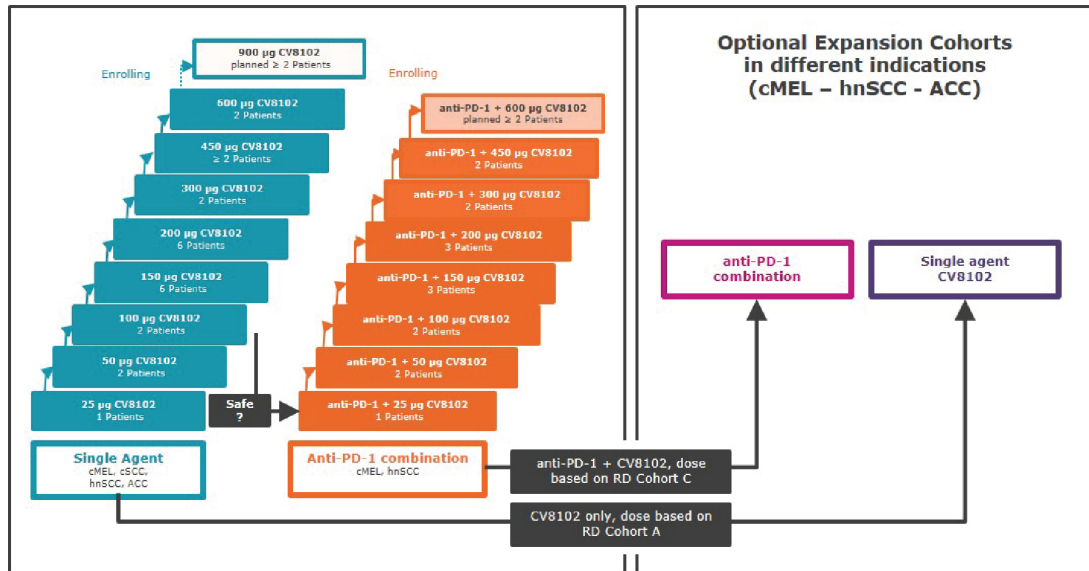
Characteristics	Number of patients (%)		
	Single agent (n=24)	anti-PD-1 combination (n=16)	All (n=40)
Age range (yrs)	35-91	36-90	35-91
Gender			
Male	10 (42)	6 (37)	16 (40)
Female	14 (58)	10 (63)	24 (60)
cMEL			
Stage IIIB	1 (4)	0 (0)	1 (3)
Stage IIIC	3 (13)	2 (13)	5 (13)
Stage IV	6 (25)	12 (75)	18 (45)
HNSCC			
Stage II	1 (4)		
Stage IV	3 (13)	2 (13)	6 (15)
SCC			
Stage IV	3 (13)	0 (0)	3 (8)
ACC			
Stage IV	7 (29)	0 (0)	7 (18)
ECOG PS			
0	12 (50)	12 (75)	24 (60)
1	12 (50)	4 (25)	16 (40)
Pre-treatment anti-PD-1	13 (54)	14 (88)	27 (68)
Pre-treatment with anti-CTLA4	2 (8)	8 (50)	10 (25)

Percentages presented above have been rounded to the nearest whole number.

CV8102 is administered weekly for the first five cycles and then every two to three weeks for the subsequent cycles for a total of eight injections or until disease progression or death of the patient. In the single agent cohorts, more than eight injections may be administered should the patient experience a clinical benefit.

Dose escalation of single agent CV8102 and the combination with anti-PD-1 are running in parallel, with the single-agent cohort being more advanced due to an earlier start of enrolment. We consider a dose level to be safe once it is cleared with monotherapy. This CV8102 dose level is then combined with an anti-PD-1. In parallel, the study continues with the next cohort of the dose escalation monotherapy. Once that higher monotherapy dose is considered safe, combination follows.

Phase 1 Dose Cohorts and Enrolment Status as of April 2020



As of April 2020, the clinical trial has not yet encountered a MTD and there has been no evidence of DLTs. We presented a Phase 1 trial update at the virtual ASCO Conference in May 2020.

Preliminary Safety Data

Preliminary safety data: Treatment emergent AEs occurring in $\geq 10\%$ of patients as of April 2020

AE preferred term	Number of subjects with ≥1 TEAE (%)			
	Single agent (n=24) DL 25-900 µg	anti-PD-1 combination (n=16) DL 25-600 µg	All (n=40)	
			G1/G2	≥G3
Any Adverse Event	24 (100)	16 (100)	40 (100)	13 (33%)
Pyrexia	11 (46)	6 (38)	17 (43)	-
Fatigue	11 (46)	5 (31)	16 (40)	-
Chills	5 (21)	7 (44)	12 (30)	-
Headache	9 (38)	3 (19)	12 (39)	-
Influenza-like illness	7 (29)	2 (13)	9 (23)	-
Injection site pain	6 (25)	2 (13)	8 (20)	-
Pain in extremity	4 (17)	3 (19)	7 (18)	-
Urinary tract infection	3 (13)	4 (25)	7 (18)	-
Arthralgia	4 (17)	2 (13)	6 (15)	-
C-reactive protein increased	4 (17)	2 (13)	6 (15)	-
Nausea	4 (17)	2 (13)	6 (15)	-
Decreased appetite	1 (4)	3 (19)	4 (10)	-
Injection site erythema	2 (8)	2 (13)	4 (10)	-
Injection site reaction	2 (8)	2 (13)	4 (10)	-
Interleukin 6 increased	3 (13)	1 (6)	4 (10)	-

CV8102 was generally well tolerated, with mostly mild to moderate adverse events to date. Grade 3 AEs considered related to CV8102 were self-limiting or manageable with supportive treatment and did not

show a clear dose dependency. No Grade 4 or 5 AEs related to CV8102 were reported. A maximum tolerated dose was not reached as of April 2020. Adverse events were graded according to the NCI-Common Terminology Criteria for Adverse Events. Grades refer to the severity of the adverse events with unique clinical descriptions of the severity of each AE based on the following general guideline:

Grade 1: Mild; asymptomatic or mild symptoms or clinical or diagnostic observations only or intervention not indicated.

Grade 2: Moderate; minimal, local or non-invasive intervention indicated or limiting age appropriate instrumental activities of daily living.

Grade 3: Severe or medically significant but not immediately life threatening or hospitalization or prolongation of hospitalization indicated or disabling or limiting self care activities of daily life.

Grade 4: Life threatening consequences or urgent intervention indicated.

Grade 5: Death related to adverse event.

As of April 2020:

- The most frequently reported adverse events occurring in more than 20% of patients were mild to moderate pyrexia, fatigue, chills, headache and influenza-like illness.
- 13 (33%) patients experienced treatment emergent \geq G3 AEs and 6 (15%) patients experienced G3 AEs considered treatment related per investigator's judgement (none of the events fulfilled criteria for dose limiting toxicities per protocol). There were no G4/5 AEs considered related to study treatment.
- In the single agent CV8102 cohort, 3 patients (1 at 150 μ g dose level, 2 at 200 μ g dose level) experienced transient G3 elevations of liver enzymes. 1 patient (150 μ g dose level) experienced a G3 abscess (SAE) of the injected tumor lesion 3 months after the last administration of CV8102. Prior to the event, a necrosis of the injected tumor lesion was observed. The abscess resolved after antibiotic and surgical treatment. In view of the long latency between last injection of CV8102 and abscess formation the event was considered a potential secondary effect of tissue damage and inflammation induced by CV8102.
- In the combination cohort of CV8102 with anti PD-1 antibodies, 1 patient (100 μ g dose level) experienced G3 hypertension, mild chills and tachycardia on day of administration of CV8102 and anti-PD-1 requiring inpatient observation (SAE) and transient asymptomatic G3 elevation of serum lipase. 1 patient (100 μ g dose level) experienced transient asymptomatic G3 elevation of serum amylase.

Treatment related Serious Adverse Effects (SAEs)

- In the single agent CV8102 cohort, 1 patient experienced G2 CRP increase (150 μ g dose level), 1 patient experienced G3 abscess of injected tumor lesion (150 μ g dose level), 1 patient experienced G2 worsening tumor pain (200 μ g dose level), and 1 patient experienced G1 chills, pyrexia and vomiting and G2 pyrexia (300 μ g dose level).
- In the combination cohort of CV8102 with anti-PD-1 antibodies, 1 patient required inpatient observation (G3) after multiple AEs (100 μ g dose level) and 1 patient experienced G2 cytokine release syndrome (300 μ g dose level).

Preliminary Efficacy Data

Tumor responses were assessed according to Response Evaluation Criteria in Solid tumors, or RECIST 1.1. The overall response evaluation according to RECIST 1.1 integrates changes in both measurable and non-measurable tumor lesions that can be assessed by radiographic imaging (CT or MRI) or clinical examination (documented by photographs). Assessment was performed by the investigators at baseline and at defined time points during the study period. Responses per RECIST 1.1 criteria are defined as follows:

A complete response, or CR, is the disappearance of all tumor lesions that were present before start of treatment without appearance of new lesions.

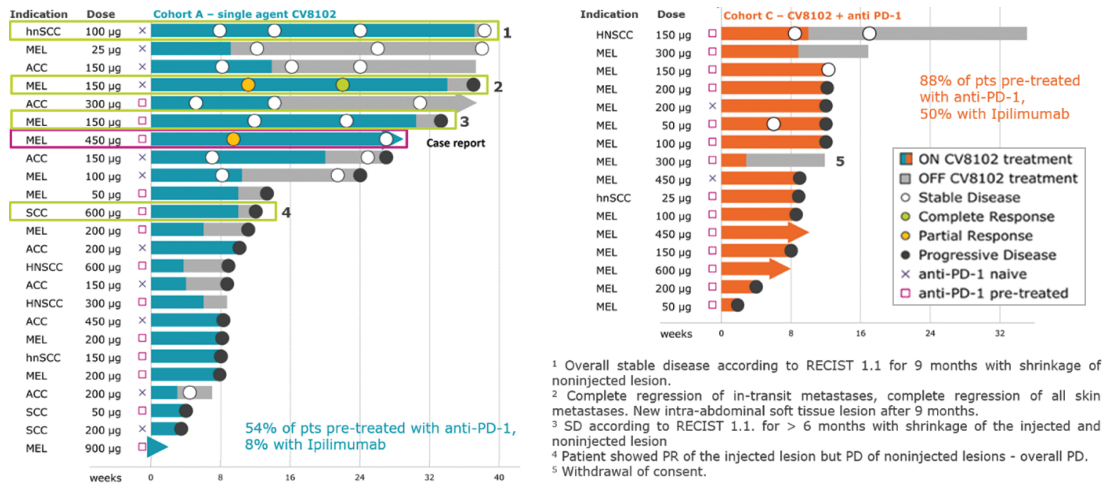
A partial response, or PR, is a $\geq 30\%$ decrease in the sum of diameters of specified tumor lesions (called target lesions) taking as reference the baseline sum diameters without progression or disappearance of the other lesions and without appearance of new lesions or CR of target lesions without disappearance of other lesions but without progression or appearance of new lesions.

Progressive disease, or PD, indicates a $\geq 20\%$ increase in the sum of diameters of specified tumor lesions (called target lesions) (taking as reference the smallest sum of diameters while on study) and at least a 5 mm increase and/or an unequivocal progression of existing further lesions (called nontarget lesions) or appearance of new lesions.

Stable disease indicates there is neither sufficient shrinkage nor increase in size of tumor lesions to declare PR or PD and no appearance of new lesions.

The tables below show duration of treatment, response and time to progression of individual patients enrolled in the trial.

Preliminary data on overall tumor response and duration according to RECIST 1.1 as of April 2020



Preliminary efficacy data single agent CV8102

As of April 2020, the Phase 1 study has observed one patient with a complete response and one patient with a partial response according to RECIST 1.1 and two further patients experiencing stable disease according to RECIST 1.1 with shrinkage of noninjected lesions after single agent CV8102. Overall 8 of 24 (33%) patients treated with single agent CV8102 remained free of progression for at least six months.

Preliminary efficacy in combination with PD-1 antibodies

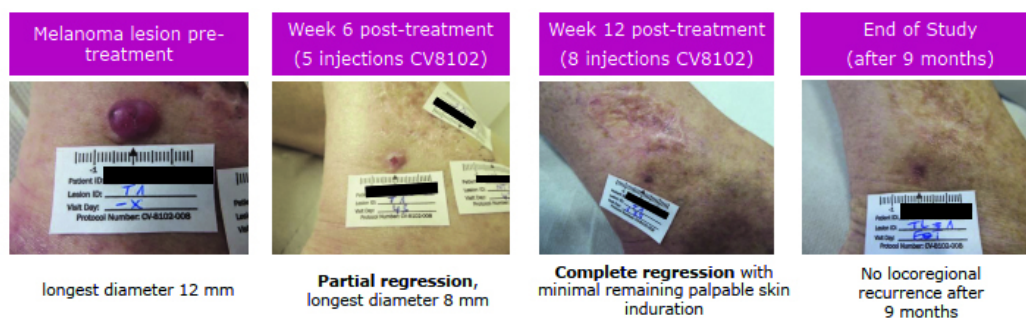
As of April 2020, no objective responses or cases of SD with tumor shrinkage have been observed in the PD-1 combination cohort. Out of 16 patients enrolled, one PD-1 pre-treated patient with HNSCC and one PD-1 refractory melanoma patient experienced stable disease after the 8 week treatment period.

The number of treated patients and follow up time in this cohort were more limited as compared to the single agent cohort. The patient population was also more heavily pretreated compared to the patients enrolled in the single agent cohort (88% vs. 54% were pretreated with anti-PD-1 antibodies and 50% vs. 8% with anti-CTLA-4 antibodies).

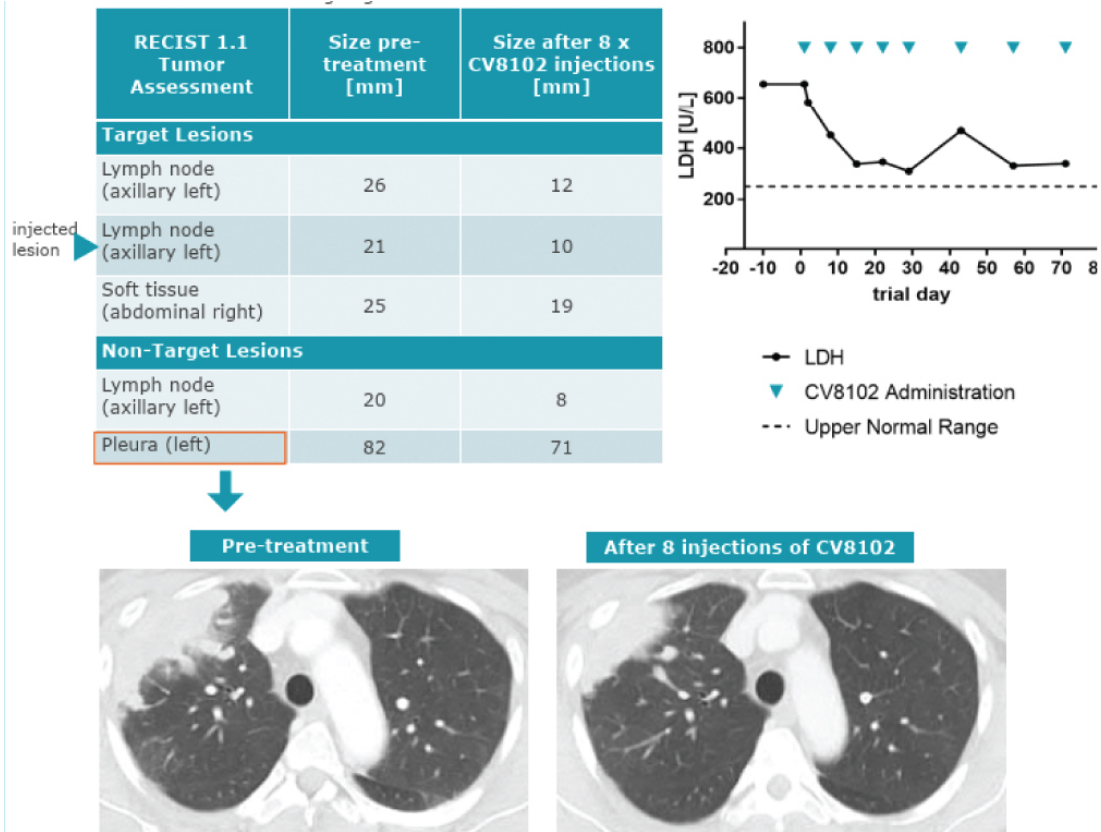
Single Agent Response Data

Case reports of patients with observed tumor shrinkage after single agent CV8102:

- A 74-year-old female patient with Stage IIIC melanoma and multifocal in-transit metastases was treated with single agent CV8102 (150 µg). The pictures below show the injected primary tumor before treatment, after first five weekly injections, and after eight injections at 12 weeks. After the first five injections, a partial regression of the injected lesion became apparent, which turned into a complete regression after eight injections (12 weeks). An MRI scan showed a complete regression of all noninjected in transit metastases. The response data together represent a confirmed complete response based on RECIST 1.1 criteria. The patient continued to receive injections at monthly intervals for up to nine months without locoregional recurrence but there was occurrence of a new intraabdominal soft tissue lesion.



- A 50-year-old female patient with Stage IV melanoma, metastases in ipsilateral supraclavicular lymph nodes and distant detectable metastases at study entry was treated with single agent CV8102 (450 µg). The patient previously experienced early tumor progression on adjuvant treatment with Nivolumab and subsequently underwent multiple resections of cutaneous and lymph node metastases and radiation prior to study entry. The patient received 8 intratumoral injections of CV8102 into an axillary lymph node metastasis. After an early decrease in serum LDH she developed a partial response. Treatment with CV8102 was ongoing as of April 2020. The table below shows the decrease in the size of measurable tumor lesions after 8 intratumoral injections of CV8102. The CT scan shows the decrease in size of the noninjected metastatic pleural lesion. The graph shows the decrease in serum LDH over time during the treatment period.

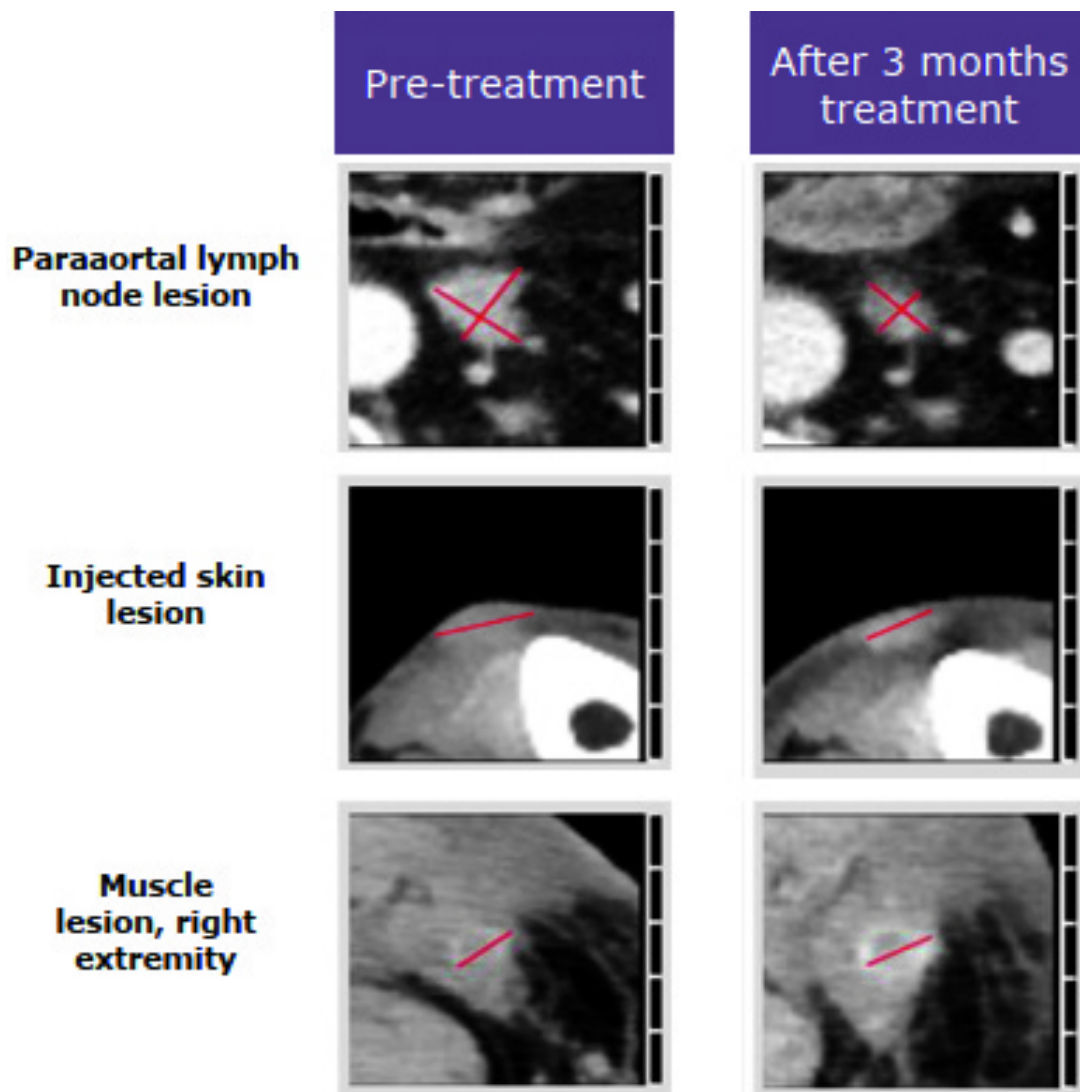


- A 91-year-old male patient with Stage IV HNSCC with large buccal and small lip lesion and a contralateral metastatic cervical lymph node was treated with single agent CV8102 (100 µg) after pretreatments with cetuximab, external beam radiation, and multiple surgeries. The patient

experienced prolonged stable disease according to RECIST 1.1 until the end of study after nine months. Whereas the injected buccal lesion remained stable in size, the noninjected contralateral metastatic lymph node showed ongoing regression.



- A 64-year-old male patient with stage IV melanoma (150 µg dose level, single agent CV8102) who had progressed on previous anti-PD-1 antibody treatment experienced stable disease according to RECIST 1.1 for six months, with shrinkage of the injected lesion in the skin, and shrinkage of a noninjected contralateral paraaortic lymph node lesion.

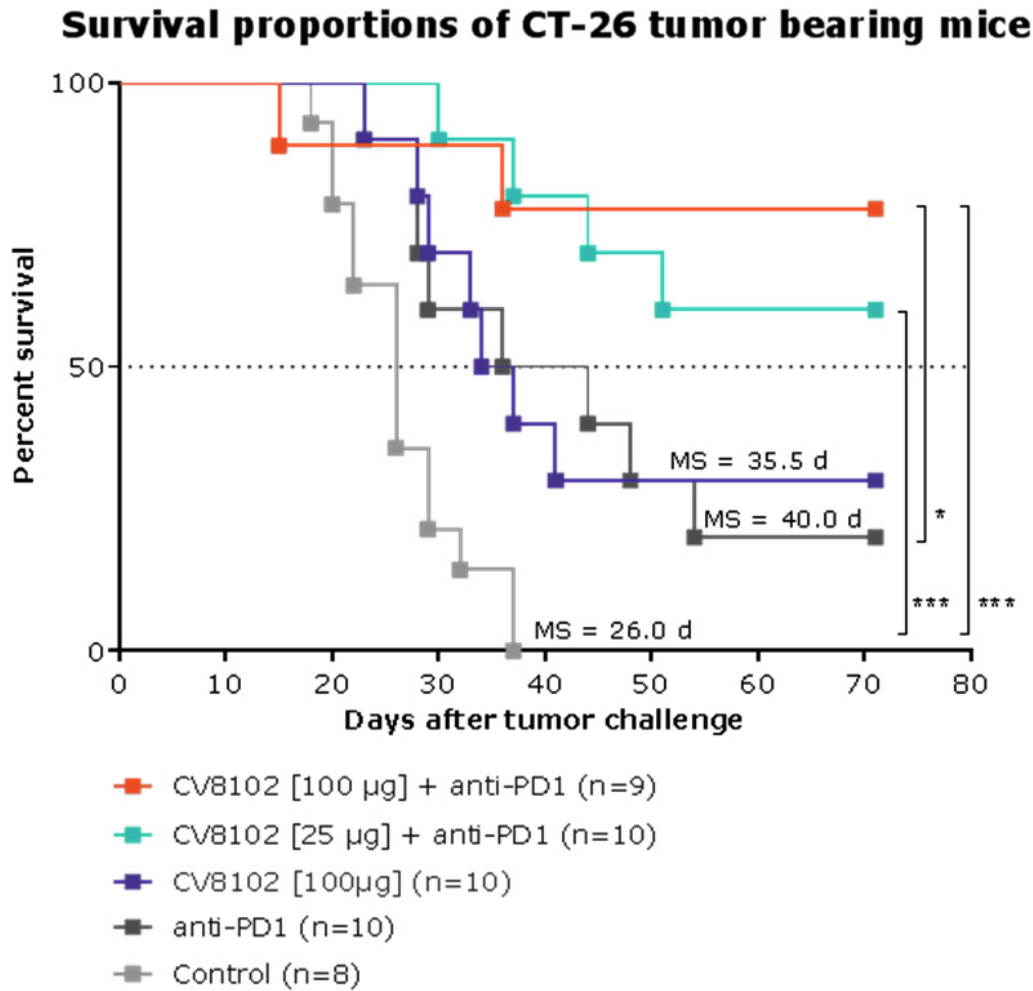


CV8102 with Rabies Vaccine

We completed a Phase 1 clinical trial to investigate the safety and tolerability of intramuscular administered CV8102 and an intramuscular administered combination of CV8102 and rabies vaccine in humans. CV8102 was injected intramuscularly on days 0 and 21 either alone or mixed with fractional doses of the licensed rabies vaccine (Rabipur) as model antigen. The primary objective was to assess the safety and reactogenicity of various dose levels of CV8102 alone or combined with a licensed rabies vaccine in healthy 18 to 40 year-old male volunteers. A secondary objective was to assess the immune-enhancing potential of bedside-mixes of CV8102 with fractional doses of the licensed rabies vaccine by measuring induction of rabies virus neutralizing titers. Fifty-six volunteers received 50 to 100 µg CV8102 alone, bedside-mixed CV8102 and rabies vaccines, or the rabies vaccine alone. When given alone or mixed with the rabies vaccine, CV8102 caused mostly grade 1 or 2 local or systemic reactogenicity, but no related SAEs. Given 100 µg CV8102 was associated with marked C-reactive protein, or CRP increases, further dose escalation was stopped. Combining 25 to 50 µg of CV8102 with fractional doses of the rabies vaccine significantly improved the kinetics of virus neutralizing titer responses, and 50 µg CV8102 also improved the magnitude of virus neutralizing titer responses to 1/10 of the rabies vaccine but caused severe but self-limiting influenza-like symptoms in two of 14 subjects. In conclusion, two intramuscular doses of 25- 50 µg CV8102 appeared well tolerated with an acceptable reactogenicity profile while significantly enhancing the immunogenicity of fractional doses of the licensed rabies vaccine.

CV8102 Key Preclinical Data

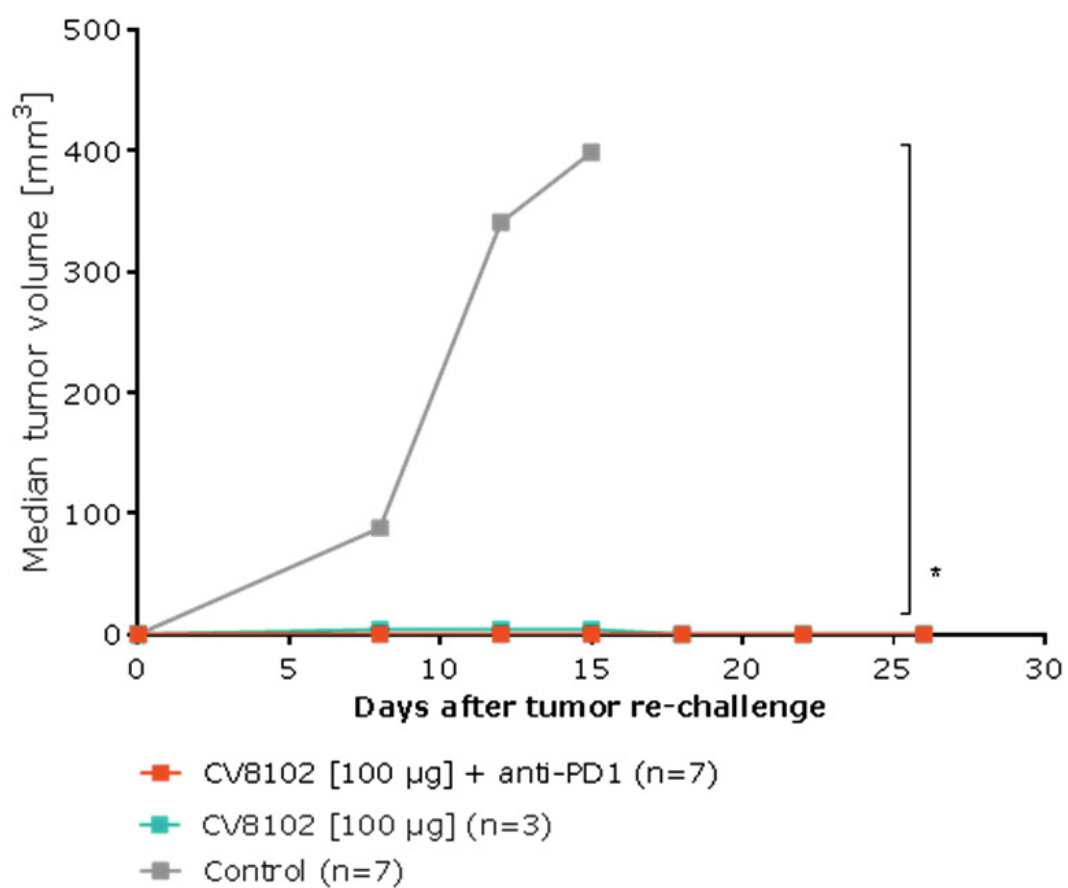
In preclinical tumor models, CV8102 showed dose dependent antitumor activity as single agent and synergistic activity in combination with systemic anti-PD-1 antibodies, including therapeutic activity in the A20 tumor model that did not respond to systemic anti-PD-1 antibody therapy alone.

Synergistic activity observed in CV8102 and anti-PD-1 combination therapy

In a Kaplan-Meier curve, the graph above demonstrates the effect of monotherapy CV8102 treatment and combination of CV8102 with anti-PD-1 treatment. In the murine CT26 tumor model, an established colon carcinoma model, treatment led to an increased survival time, an increased proportion of animals surviving, and a memory effect (protective immunity of animals who achieved a complete remission after tumor re-challenge). In this model, the anti-PD-1 monotherapy as well as the CV8102 show limited improvement in survival times, whereas the combination of CV8102 and anti PD-1 resulted in a significant prolongation of survival times.

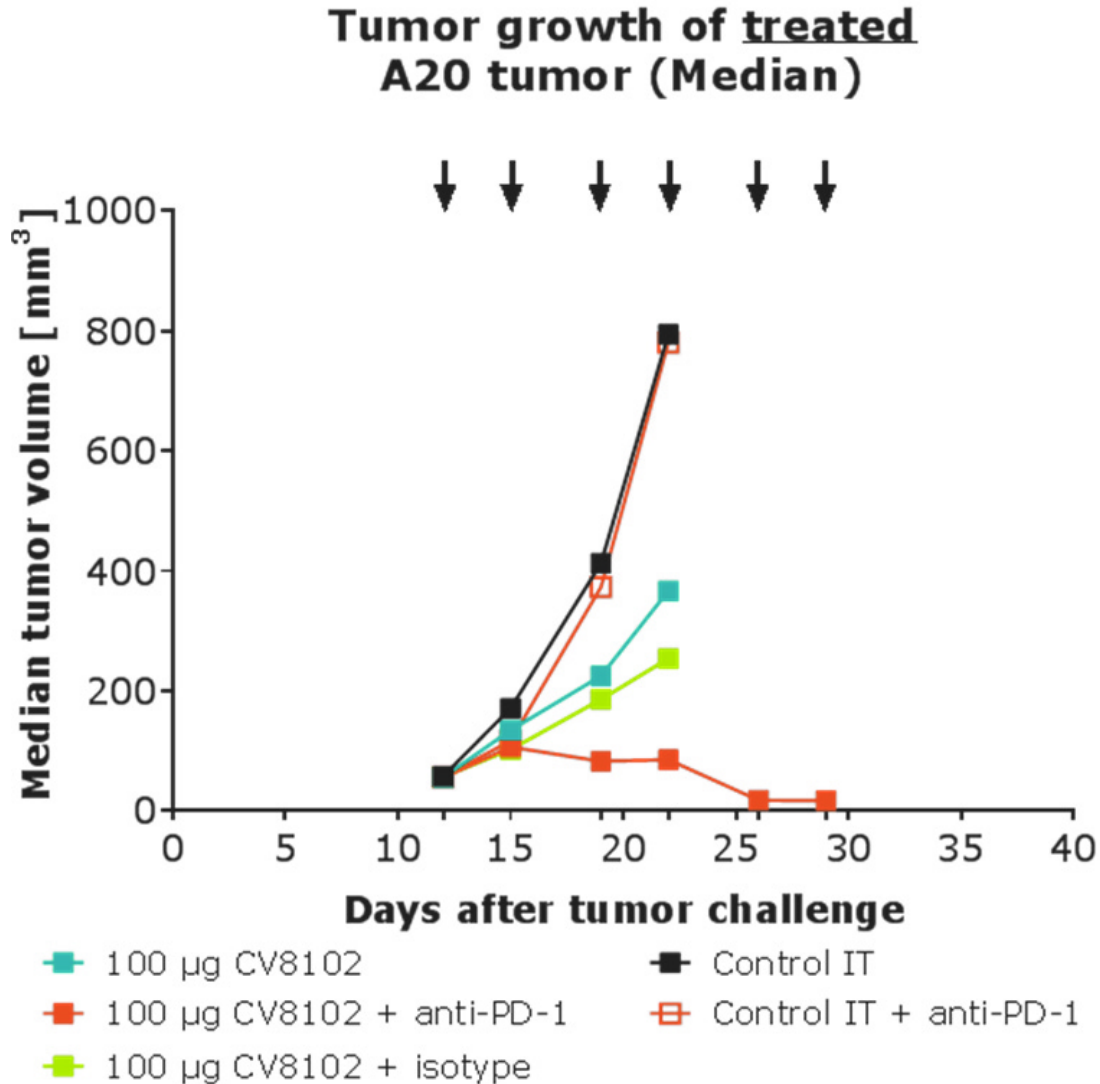
CV8102 + anti-PD-1 treatment confers protective immunity against tumor re-challenge

Tumor growth kinetics after CT-26 re-challenge



The graph above takes those animals from the previously described experiment that survived and were cured either with CV8102 alone or with combination therapy. The control arm represents animals that did not have any pretreatment. Animals treated with prior CV8102 and CV8102 treatment in combination with anti-PD-1 that were tumor-free following the prior experiment were re-challenged with the same tumor and showed no observed regrowth of the tumor. Those animals that survived and were cured and then re-challenged had a protective immunity against the tumor, which is an effect of the original treatment with CV8102 alone or in combination with anti-PD-1.

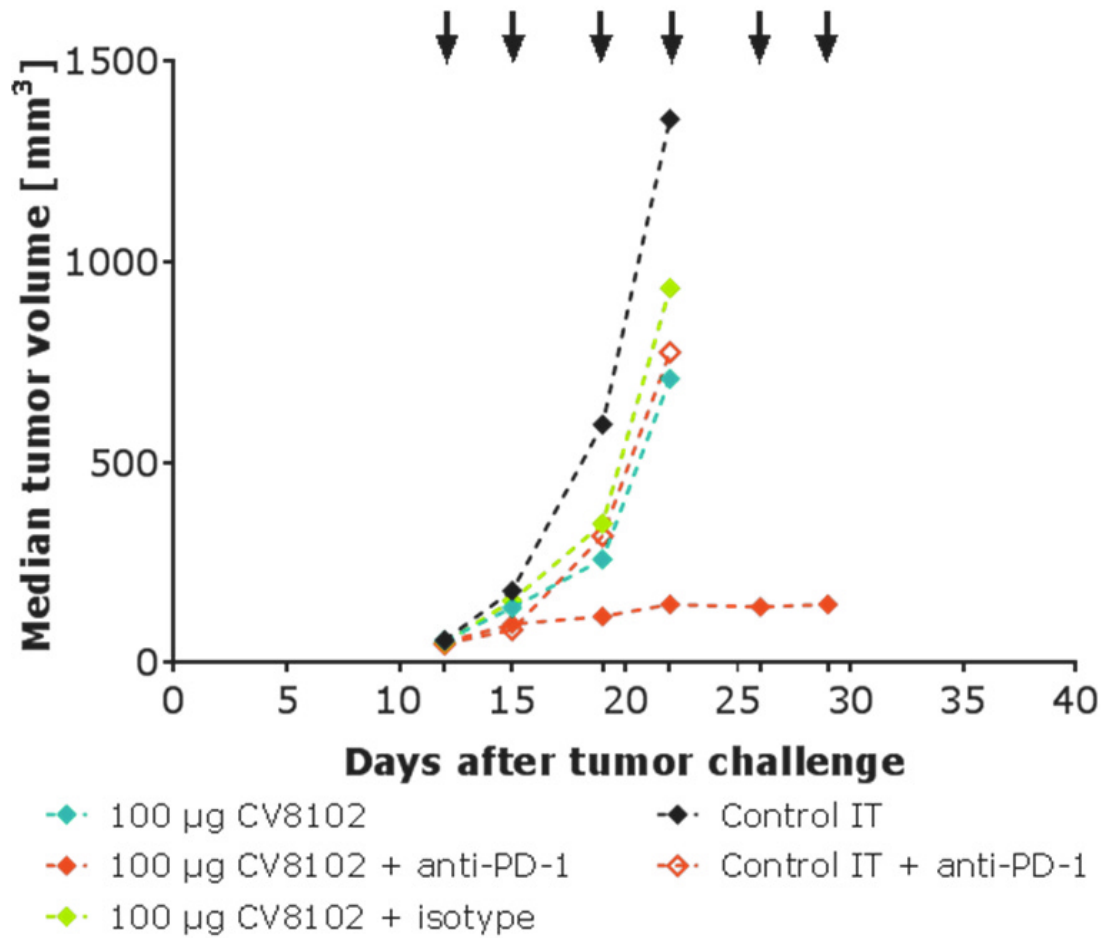
CV8102 + anti-PD-1 treatment leads to complete tumor remission in anti-PD-1 resistant A20 tumor model



The graph above represents a study performed in the A20 tumor model, which is non-responsive to anti-PD-1 therapy. The anti-PD-1 monotherapy did not result in any inhibition of tumor growth. Treatment with CV8102 monotherapy showed some inhibition of tumor growth and combination therapy of CV8102 and anti-PD-1 demonstrated synergistic anti-tumor activity.

CV8102 + anti-PD-1 treatment leads to complete remission of abscopal untreated tumors

Abscopal effect: untreated A20 tumor (Median)



The graph above depicts an experiment that was conducted simultaneously to the prior A20 model experiment in such a way that the animals received tumor injections in both flanks (left and right), but

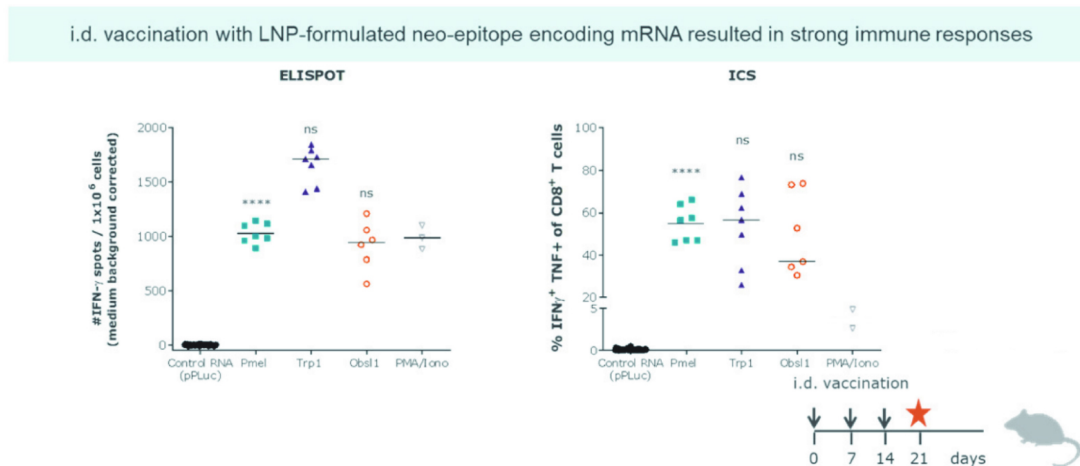
intratumoral treatment occurred only in the left flank. This graph shows data from the untreated flanks and demonstrates the abscopal effect which mirrors that observed in the prior experiment, whereby anti-PD-1 monotherapy has no effect, CV8102 alone exhibits limited improvement in survival times, and the combination of CV8102 and anti-PD-1 results in complete remission in four out of 10 animals.

Discovery of mRNA candidates for intratumoral treatments

We are currently investigating combinations of mRNA encoding different immunostimulatory proteins (e.g. cytokines) with the aim to identify combinations with high therapeutic efficacy in anti-PD-1 refractory preclinical tumor models. We are also working to optimize mRNA design and formulation to optimize protein expression in the tumor tissue. These mRNA treatments are intended for the treatment of PD-1 low responsive or refractory tumors with accessible tumor lesions.

Discovery of new therapeutic cancer vaccine candidates

Our discovery efforts in oncology are also focusing on novel therapeutic cancer vaccine candidates. In preclinical studies, we have demonstrated that LNP formulated mRNA vaccines encoding are able to induce T cell responses against model neoantigens as well as tumor associated self-antigens.



The graphs above demonstrate the induction of antigen-specific T cell responses after intradermal vaccination of mice with LNP-formulated mRNA encoding for selected neoepitopes. Animals vaccinated with LNP-formulated mRNA encoding reporter protein served as negative controls. Stimulation of splenocytes harvested 7 days post last vaccination with respective peptides demonstrated strong induction of antigen specific T cells in Elispot (depicted in the left hand graph) and FACs analysis (depicted in the right hand graph).

BI1361849 (formerly CV9202) for the treatment of Non-Small Cell Lung Cancer, or NSCLC

BI1361849 is a product candidate for a therapeutic vaccine designed to elicit antigen-specific immune responses against tumor-associated antigens frequently overexpressed in patients with NSCLC (namely NY-ESO1, Mage C1, Mage C2, Survivin, 5 T4, and Muc1). We have partnered BI1361849 with Boehringer Ingelheim, who is advancing the product candidate through clinic development. BI1361849 is currently being evaluated in a Phase 1/2 clinical trial in NSCLC in combination with durvalumab, a PD-L1 inhibitor, and tremelimumab, an anti CTLA-4 antibody. The clinical trial is being conducted by the Ludwig Institute for Cancer Research (LICR).

Mechanism of action of BI1361849

BI1361849 acts through two synergistic pathways. Free mRNA molecules encode the protein sequence of the six antigens which are translated into proteins, and protamine-coated mRNA molecules act

as a vaccine adjuvant to activate the innate immune system which recruits and activates antigen presenting cells. The antigen-presenting cells display the translated antigens to T-cells and B-cells to elicit an adaptive immune response against such antigens, including activation of cytotoxic T-cells and antibody-producing B-cells. The mRNAs in BI1361849 encode the NSCLC-associated antigens NY-ESO-1, MAGE-C1, MAGE-C2, survivin, 5T4, and MUC-1.

Market Opportunity

Lung cancer is the most common form of cancer worldwide and the most common cause of cancer-related deaths in both men and women. According to ACS, in 2018, there were approximately 2 million new cases of lung cancer worldwide and approximately 1.7 million related deaths. According to ASCO, In the United States, there were approximately 230,000 new cases of lung cancer and an estimated 154,000 deaths from the disease. The deaths from lung cancer account for approximately 25% of all cancer deaths in the United States. NSCLC accounts for approximately 80% to 85% of lung cancer cases.

Surgery is the recommended treatment for early stage NSCLC patients, but 75% of lung cancers are diagnosed at stage III or IV when resection is no longer possible. Targeted therapies are used for metastatic NSCLC with Estimated Glomerular Filtration Rate, or EGFR, c-ros oncogene 1, or ROS1, BRAF and Anaplastic lymphoma kinase, or ALK mutations. However, in up to 50% of advanced NSCLC patients, who are ineligible or resistant to treatment with EGFR or ALK inhibitors, the treatment of choice is a PD-1 / PD-L1 checkpoint inhibitor, because of elevated levels of PD-L1. Despite the availability of multiple therapies, the prognosis remains poor, with overall five-year survival for all patients diagnosed with NSCLC as low as 18%, based on data from the American Lung Association.

Phase 1/2 clinical trial of BI1361849 in combination with durvalumab and tremelimumab

The Ludwig Institute for Cancer Research has initiated a Phase 1/2 clinical trial investigating BI1361849 (former CV9202) in combination with the PD-L1 inhibitor durvalumab and anti-CTLA-4 antibody tremelimumab in patients with advanced NSCLC. The primary endpoint of this trial is safety, with secondary endpoints of objective response rate, progression free survival, duration of response, and overall survival.

This open-label multicenter two-arm study is to evaluate the safety and preliminary efficacy of the addition of a vaccine therapy to 1 or 2 checkpoint inhibitors for NSCLC. The first arm evaluates BI1361849 in combination with durvalumab (anti-PD-1), and the second arm evaluates BI1361849 in combination with both durvalumab (anti-PD-1) and tremelimumab (anti-CTLA4). For each arm of the study, there is a dose evaluation phase in which the recommended combination dose, or RCD, is determined according to a standard 3 + 3 design. The dose evaluation phase is followed by an expansion phase, in which the cohort at the RCD is expanded to 20 subjects (inclusive of the subjects from the dose evaluation cohort).

Clinical Data

BI1361849 (former CV9202) was investigated in an exploratory, open-label, multicenter Phase 1b trial. The Phase 1b trial evaluated treatment with BI1361849 combined with local radiation in 26 stage IV NSCLC patients with partial response (PR)/stable disease (SD) after first-line standard therapy. The study was conducted across 13 centers in Germany, Austria and Switzerland. Eligible patients were 18 years old or older with histologically or cytologically confirmed stage IV NSCLC and for those with non-squamous cell histology, a confirmed EGFR mutation status. Patients were stratified into three strata:

- Non-squamous NSCLC, EGFR mutation, PR/SD after ≥ 4 cycles of platinum- and pemetrexed-based treatment (n= 16);
- Squamous NSCLC, PR/SD after ≥ 4 cycles of platinum-based and non-platinum compound treatment (n= 8); and
- Non-squamous NSCLC, EGFR mutation, PR/SD after ≥ 3 and ≤ 6 months EGFR-tyrosine kinase inhibitor (TKI) treatment (n= 2).

Patients received intradermal BI1361849, local radiation (4×5 Gy), then BI1361849 until disease progression requiring the start of systemic second-line treatment or patients experiencing unacceptable

toxicity. Strata 1 and 3 also had maintenance pemetrexed or continued EGFR-TKI therapy, respectively. The primary endpoint was evaluation of safety and secondary objectives included assessment of clinical efficacy (every 6 weeks during treatment) and of immune response on Days 1 (baseline), 19 and 61.

The mean number of successful BI1361849 administrations, defined as successful administration of at least 10 of the 12 injections per treatment, was 8.4 (range 2 to 25) with median duration of treatment of 81 days. Study treatment appeared well tolerated with injection site reactions and flu-like symptoms were the most common BI1361849-related adverse events. For the primary endpoint, BI1361849-and/or-radiation-related AEs of \geq grade 3 were reported in four (15.6%) of the 26 patients: two patients (12.5%) in stratum 1 (one event each of dysphagia and fatigue), one patient (12.5%) in stratum 2 (fatigue), and one patient (50%) in stratum 3 (pyrexia). Three out of 4 events were related to BI1361849 and one event (dysphagia) was related to study radiation. There were no serious treatment emergent adverse event, or TEAEs related to BI1361849 and no TEAEs leading to death. The following table provides an overview of the TEAEs by stratum.

Overview of treatment emergent adverse events (safety analysis set)

Patients with a least one event, n (%)	Stratum 1 (n=16)	Stratum 2 (n=8)	Stratum 3 (n=2)	Overall (n=26)
TEAE	16 (100.0)	8 (100.0)	2 (100.0)	26 (100.0)
BI1361849- and/or radiation-related AE	16 (100.0)	8 (100.0)	2 (100.0)	26 (100.0)
TEAE related to BI1361849	15 (93.8)	8 (100.0)	2 (100.0)	26 (96.2)
TEAE related to radiation	4 (25.0)	1 (12.5)	0 (50.0)	5 (19.2)
Serious TEAE	7 (43.8)	3 (37.5)	1 (50.0)	11 (42.3)
Serious BI1361849- and/or radiation-related AE	1 (6.3)	0	0	1 (3.8)
Related to BI1361849	0	0	0	0
Related to radiation	1 (6.3)	0	0	1 (3.8)
TEAE toxicity grade \geq 3 ^a	9 (56.3)	4 (50.0)	2 (100.0)	15 (57.7)
BI1361849- and/or radiation-related AE toxicity grade \geq 3 ^a	2 (12.5)	1 (12.5)	1 (50.0)	4 (15.4)
Related to BI1361849	1 (6.3)	1 (12.5)	1 (50.0)	3 (11.5)
Related to radiation	1 (6.3)	0	0	1 (3.8)
Serious BI1361849- and/or radiation-related AE toxicity grade \geq 3 ^a	1 (6.3)	0	0	1 (3.8)
Related to BI1361849	0	0	0	0
Related to radiation	1 (6.3)	0	0	1 (3.8)
TEAE leading to discontinuation	4 (25.0)	0	0	4 (15.4)
TEAE toxicity grade \geq 3 leading to discontinuation	2 (12.5)	0	0	2 (7.7)
TEAE leading to interruption/dose modification	4 (25.0)	0	0	4 (15.4)
TEAE leading to death	0	0	0	0

Abbreviations: AE adverse event, TEAE treatment-emergent adverse event

^a National Cancer Institute-Common Terminology Criteria for Adverse Events (NCI-CTCAE) toxicity grading

In comparison to baseline, 25 patients evaluable for immunomonitoring revealed increased BI1361849 antigen-specific immune responses in the majority of patients (84%), whereby antigen-specific antibody levels were increased in 80% and functional T cells in 40% of patients, and involvement of multiple antigen specificities was evident in 52% of patients. Additional exploratory, post-hoc analysis demonstrated detectable increase of functional CD4⁺ and CD8⁺ T cells to BI1361849 over time. Broadening of the antibody repertoire against antigens not covered by BI1361849 was also observed in 50% of all evaluable patients and in eight of the 14 (57%) analyzable pemetrexed treated patients in stratum 1. This demonstrated that the combination of radiotherapy with active tumor immunotherapeutic BI1361849 can initiate an antigen cascade to broaden the anti-tumor immune response.

Of the 26 patients in the safety set evaluated for efficacy, overall 46% (12 of 26) demonstrated stable disease as best overall response. One patient treated in combination with pemetrexed chemotherapy achieved a confirmed partial response with decreasing measurable tumor size up to the last follow-up visit. Another patient exhibited decreasing target lesion sizes not formally qualifying as PR. Shrinkage of non-irradiated lesions greater than 15% occurred in six patients, five in stratum 1 and one in stratum 2. Median progression free survival was 2.87 months (95% CI; range 1.43-4.27) and median overall survival time from first treatment was 13.95 months (95% CI; range 8.93-20.87).

Best overall response (safety analysis set)

Parameter	Patients with response, n (%) [95% confidence interval]			
	Stratum 1 (n=16)	Stratum 2 (n=8)	Stratum 3 (n=2)	Overall (n=26)
Response (CR + PR) rate	1 (6.3) [0.2-30.2]	0 [0.0-36.9]	0 [0.0-84.2]	1 (3.8) [0.1-19.6]
Best overall response				
CR	0 [0.0-20.6]	0 [0.0-36.9]	0 [0.0-84.2]	0 [0.0-13.2]
PR	1 (6.3) [0.2-30.2]	0 [0.0-36.9]	0 [0.0-84.2]	1 (3.8) [0.1-19.6]
SD	8 (50.0) [24.7-75.3]	3 (37.5) [8.5-75.5]	1 (50.0) [1.3-98.7]	12 (46.2) [26.6-66.6]
PD	7 (43.8) [19.8-70.1]	4 (50.0) [15.7-84.3]	1 (50.0) [1.3-98.7]	12 (46.2) [26.6-66.6]
NE	0 [0.0-20.6]	1 (12.5) [0.3-52.7]	0 [0.0-84.2]	1 (3.8) [0.1-19.6]

Confirmed response according to Response Evaluation Criteria for Solid Tumors (RECIST) version 1.1

Abbreviations: CR complete response, NE not evaluable, PD progressive disease, PR partial response, SD stable disease

In these initial trials, BI1361849 was administered via conventional needle based intradermal injection, later shown to be a suboptimal mode of injection for the protamine formulated rabies vaccine. Our preclinical data demonstrated improved antigen expression at the site of injection if the protamine formulated vaccine was injected via a needle free jet device. Based on that data, BI and LICR decided to use needle free injection technique in the LICR trial. Additionally, based on preclinical data showing a synergism of mRNA vaccines and systemic immune checkpoint blockade along with widespread use of PD-L1 inhibitors in advanced NSCLC, BI decided to continue the further development of BI1361849 in combination with immune checkpoint blockade.

RNA-Based Prophylactic Vaccines

CV7202: Rabies Vaccine

CV7202 is our next-generation rabies vaccine encoding the rabies virus glycoprotein, RABV-G protein formulated with LNPs, which have shown to increase immunogenicity in animal models. RABV-G is one of only five proteins encoded by the rabies virus. As a dominant part of the virus surface and its role in virus entry into the host cell, RABV-G is the only target of virus-neutralizing antibodies conferring protection against challenge.

We initiated a Phase 1 clinical trial for CV7202 in the fourth quarter of 2018, which is fully enrolled. Follow-up in this clinical trial is ongoing and data will be collected along the different time points during the study. We will follow all study participants for up to two years after their last vaccination to collect safety data and to monitor persistence of VNT and other immune parameters.

Rabies Disease Background

Rabies is an infectious viral disease that is almost always fatal following the onset of clinical symptoms. In up to 99% of cases, domestic dogs are responsible for rabies virus transmission to humans.

Rabies can affect both domestic and wild animals. It is spread to people through bites or scratches, usually via saliva. According to the World Health Organization, rabies remains an important disease, leading to 60,000 human deaths every year worldwide, primarily in Asia and Africa where dog rabies is endemic.

There are commercially available rabies vaccines that are both safe and effective. They can be used to prevent rabies before and for a period of time after exposure to the virus (such as by a dog or bat bite). However, these vaccines require multiple vaccinations both before and after virus exposure. Additional major limitations for the commercially available rabies vaccines are cost and access, particularly in the developing world, as well as supply shortages.

CV7202 Phase 1 Clinical Trial

We initiated a Phase 1 clinical trial for CV7202 in the fourth quarter of 2018. This ongoing non-randomized, open label Phase 1 clinical trial evaluates safety, including reactogenicity, and immunogenicity after 1 and 2 doses of investigational Rabies vaccine CV7202, administered intramuscularly in healthy adults 18 to 40 years of age, at different doses. A control group received Rabipur according to the standard schedule. The primary objective is the assessment of safety and the key secondary endpoint assesses the proportion of subjects with a protective immune response as defined by WHO as rabies-specific serum VNTs ≥ 0.5 IU/ml.

Key inclusion criteria:

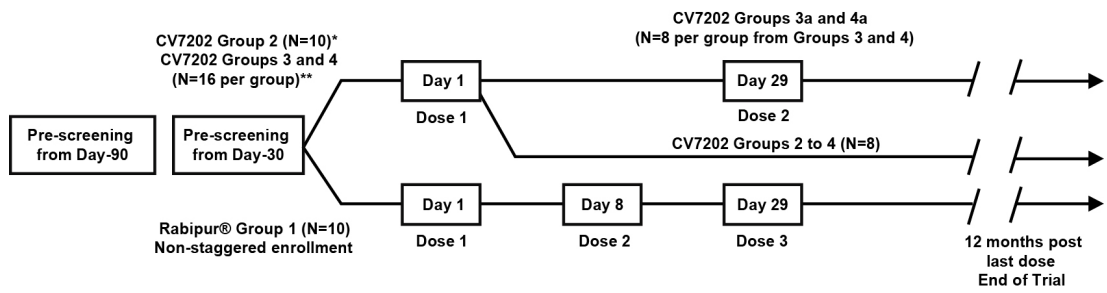
Subjects must satisfy the following criteria at trial entry:

- Healthy male and female subjects aged 18 to 40 years; and
- Physical examination and laboratory results without clinically significant findings and Body Mass Index (BMI) ≥ 18.0 and ≤ 32.0 kg/m.²

Key exclusion criteria:

Any trial subject who meets any of the following criteria will not qualify for entry into the trial:

- Use of any investigational or non-registered product (drug or vaccine) other than the trial vaccine within 4 weeks preceding the administration of the trial vaccine, or planned use during the trial period;
- Receipt of any other vaccines within 14 days (for inactivated vaccines) or 28 days (for live vaccines) prior to enrolment in this trial or planned receipt of any vaccine within 28 days of any trial vaccine administration;
- Receipt of any licensed or investigational rabies vaccine prior to the administration of the trial vaccine;
- Administration of immunoglobulins (Igs) and/or any blood products within the 3 months preceding the administration of any dose of the trial vaccine; or
- Known allergy to any component of CV7202 such as type I allergy to beta-lactam antibiotics or Rabipur.



Patient demographics:

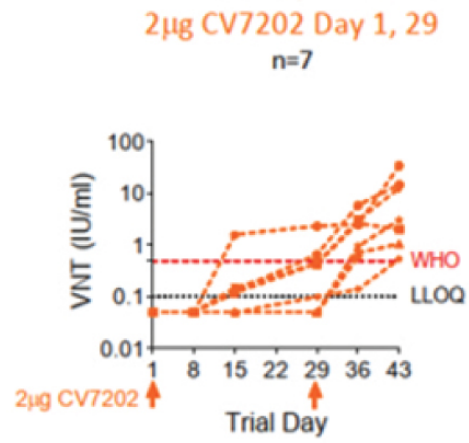
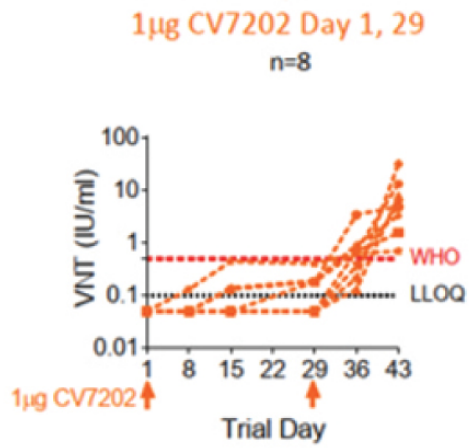
As of March 16, 2020, we enrolled a total of 53 subjects in three CV7202 groups, 1µg (n=16), 2µg (n=16) and 5µg (n=10), and one Rabipur group (n=11) as control. In both the CV7202 1µg and 2µg groups, subjects received a single dose of CV7202 on Day 1 (n=8), or 2 doses of CV7202 on Days 1 and 29 (n=8). In the CV7202 5µg group, the 10 subjects received a single dose of CV7202 on Day 1. Of the 11 subjects enrolled in the Rabipur group received, 10 subjects received the licensed 3-dose primary vaccination schedule on Days 1, 8 and 29, respectively.

Preliminary safety results:

Based on our preliminary data as of March 2020, a dose-dependent reactogenicity was observed in the trial. Local and systemic events were solicited for 7 days after each vaccination, unsolicited events for 28 days after each vaccination and serious adverse events throughout the entire study. While all subjects in the vaccine and control groups reported at least one solicited AE, the vast majority of solicited AEs were Grade 1 or 2 in intensity and transient in nature. Grade 3 solicited AEs were experienced by none of the subjects in the CV7202 1µg and the Rabipur groups, 3/16 (19%) subjects in the CV7202 2µg group, and 7/10 (70%) subjects in the CV7202 5µg group. Grade 3 solicited local AEs were reported for 1/16 (6%) subjects in the CV7202 2µg and 1/10 (10%) subjects in the CV7202 5µg group. Grade 3 solicited systemic AEs were reported for 3/16 (19%) subjects in the CV7202 2µg group and 6/10 (60%) subjects in the CV7202 5µg group. Unsolicited AE considered as related to the vaccination increased with increasing mRNA content: from 1/8 (13%) subject after each dose in the CV7202 1µg group to 7/10 (70%) subjects in the CV7202 5µg group.

Preliminary immunogenicity results:

Based on our preliminary data as of January 2020, after two doses of 1µg or 2µg CV7202, 28 days apart, all evaluable subjects had virus neutralizing titers, or VNTs, above the ≥ 0.5 IU/mL level considered protective 14 days after Dose 2 (Day 43). Subjects in the CV7202 5 µg group did not receive a second dose of CV7202. Between the CV7202 1µg and 2µg groups, geometric mean titers, or GMTs of rabies-specific VNTs after the first dose administration showed a dose-dependent increase but, in the majority of subjects, remained below the antibody level recommended by the WHO as an adequate response to vaccination (≥ 0.5 IU/mL), considered to be protective. No further dose-dependent increase was observed in the rabies-specific VNTs following a single dose of 5µg CV7202, potentially confirming the hypothesis that they were partially suppressed by the higher than expected innate immune response. Values less than lower limit of quantification, or LLOQ, are shown as half LLOQ in the figure below.

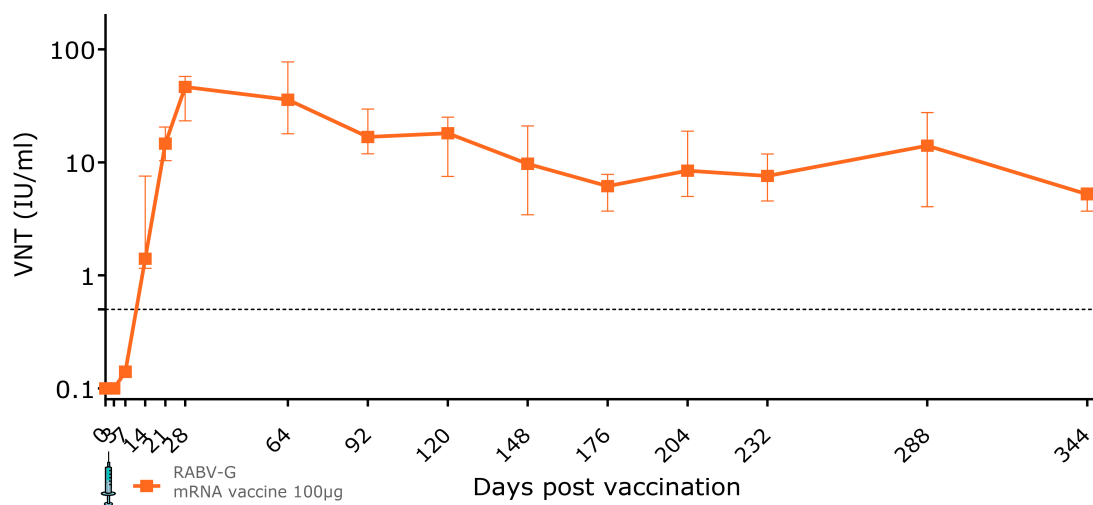


CV7202 Preclinical Data

In preclinical studies, we have shown that optimized formulation leads to more robust immune responses to multiple antigens and higher VNTs. CV7202 was found to be highly potent in multiple animal

studies, and protected against the rabies virus infection in non-human primates. CV7202 leads to rapid generation of neutralizing antibodies that exceed the threshold agreed upon by the WHO for rabies protection. These results, obtained after a single administration in non-human primates, were sustained at high levels through at least 344 days post vaccination.

CV7202 induces rabies-neutralizing antibodies after single administration in non-human primates



COVID-19 Vaccines Program

Coronaviruses are a family of viruses that can lead to respiratory illness, including Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Coronaviruses are transmitted between animals and people and can evolve into strains not previously identified in humans. On January 7, 2020, a novel coronavirus (2019-nCoV) was identified as the cause of pneumonia cases and deaths in Wuhan, China, and an exponentially increasing number of cases have since then been found in a growing number of countries worldwide. On March 11, 2020, the World Health Organization designated COVID-19, the disease caused by the novel coronavirus SARS-CoV-2, an international pandemic. The disease has infected over 2 million people around the world. More than 150,000 have died to date.

Upon publication of the sequence of the novel Coronavirus (SARS-CoV-2), we designed and optimized potential antigenic constructs based on the spike (S) protein to elicit high immunogenicity. Our approach is based on encoding a stabilized S-protein and recently we successfully conducted several preclinical studies that we started in January 2020. The results of our preclinical studies suggest that our vaccine candidate against SARS-CoV-2 was active at low dose (2µg) and induces high levels of virus neutralizing antibodies. Based on the results of preclinical studies, we initiated a Phase 1 clinical trial in June 2020, with results expected in the fourth quarter of 2020.

We have been working closely with the European regulatory authorities to advance our program into clinical testing. We are collaborating with CEPI on the development of a vaccine against SARS-CoV-2. CEPI is funding our preparatory work and early clinical studies.

We initiated a Phase 1 clinical trial for CVnCoV in June 2020. This is a partially blinded, placebo-controlled, dose-escalation, first in human, clinical trial to evaluate the safety, reactogenicity and immunogenicity after 1 and 2 doses of the investigational SARS-CoV-2 mRNA vaccine CVnCoV administered intramuscularly in healthy adults 18 to 60 years of age. The Phase 1 clinical trial is expected to include 168 healthy adults and target a dose range of 2µg to 8µg. The primary objective is the assessment of safety and the key secondary endpoint assesses the proportion of subjects seroconverting for SARS-CoV-2-neutralizing antibodies, as measured by an activity assay. The trial is expected to include three active clinical sites in Germany and one active clinical site in Belgium.

Key inclusion criteria:

Subjects must satisfy the following criteria at trial entry:

- Healthy male and female subjects aged 18 to 60 years; and
- Physical examination and laboratory results without clinically significant findings according to the investigator's assessment and body mass index (BMI) ≥ 18.0 and ≤ 32.0 kg/m².

Key exclusion criteria:

- Use of any investigational or non-registered product (vaccine or drug) other than the trial vaccine within 28 days preceding the administration of the trial vaccine, or planned use during the trial period;
- Receipt of any other vaccines within 14 days (for inactivated vaccines) or 28 days (for live vaccines) prior to enrollment in this trial or planned receipt of any vaccine within 28 days of trial vaccine administration;
- Receipt of any investigational SARS-CoV-2 or other COVID-19 vaccine prior to the administration of the trial vaccine;
- Any known allergy, including allergy to any component of CVnCoV or aminoglycoside antibiotics;
- Acute or currently active SARS-CoV-2 infection as confirmed by reactive PCR within 21 days of first trial vaccine administration;
- Administration of immunoglobulins (Igs) and/or any blood products within the 3 months preceding the administration of any dose of the trial vaccine; or
- History of confirmed COVID-19 disease, severe acute respiratory syndrome (SARS) or Middle East Respiratory Syndrome (MERS) or known exposure to an individual with confirmed COVID-19 disease or SARS-CoV-2 infection within the past 2 weeks.

Preclinical Data

Characterization of our lead vaccine candidate against SARS-CoV-2 was done in vitro and in rodent animal models. The data addressed the overall levels of Spike binding antibodies and VNTs as well as the level of CD4/CD8 positive T cells, recognizing Spike protein and the kinetics of the immunogenicity induction.

As shown in the figure below, 2 μ g of the SARS-CoV-2 mRNA vaccine candidate induced a balanced immune response with high IgG titers for both IgG1 and IgG2a along with very high VNTs that were at the maximum dilution tested. High IgG titers are the basis for development of VNTs, which are decisive for a successful neutralization of the virus. These two IgG isotypes have been used in many studies as surrogate markers of Th1 and Th2 responses. It is known that interferon- γ (as a Th1 cytokine) and IL-4 (as a Th2 cytokine) induce isotype switching to IgG2a and IgG1, respectively. A balanced Th1 and Th2 response provides best grounds for a protective vaccine.

SARS-CoV-2 mRNA vaccine candidate was observed to be immunogenic in mice and induced IFN type 1 mediated immune responses

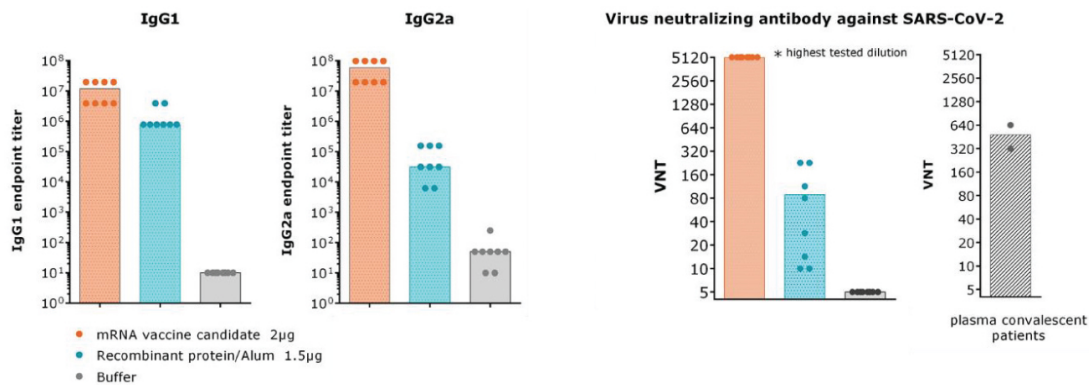


Figure. Mice ($n=8$) were injected with the SARS-CoV-2 mRNA vaccine candidate (orange columns) or Alum-adjuvanted recombinant full-length Spike protein (extracellular domain) (blue columns) via intramuscular injection on days 0 and 28. On day 49, IgG titers were measured using ELISA (left panels); VNTs are based on cytopathic effect (CPE) measured by microneutralization assay. The human positive control sera from convalescent patients is provided in the right panel (grey column). Values from individual animals (dots) and the mean (bars) are reported for each group (buffer control grey column).

Importantly, T cell analysis in the same study showed high percentage of Spike specific CD8 double positive cells as well as CD4 double positive cells, consistent with the immune response elicited by the mRNA vaccine in mice as shown in the figure below.

SARS-CoV-2 mRNA vaccine induced multifunctional (IFN γ \pm and TNF α \pm) CD4 and CD8 T cell responses

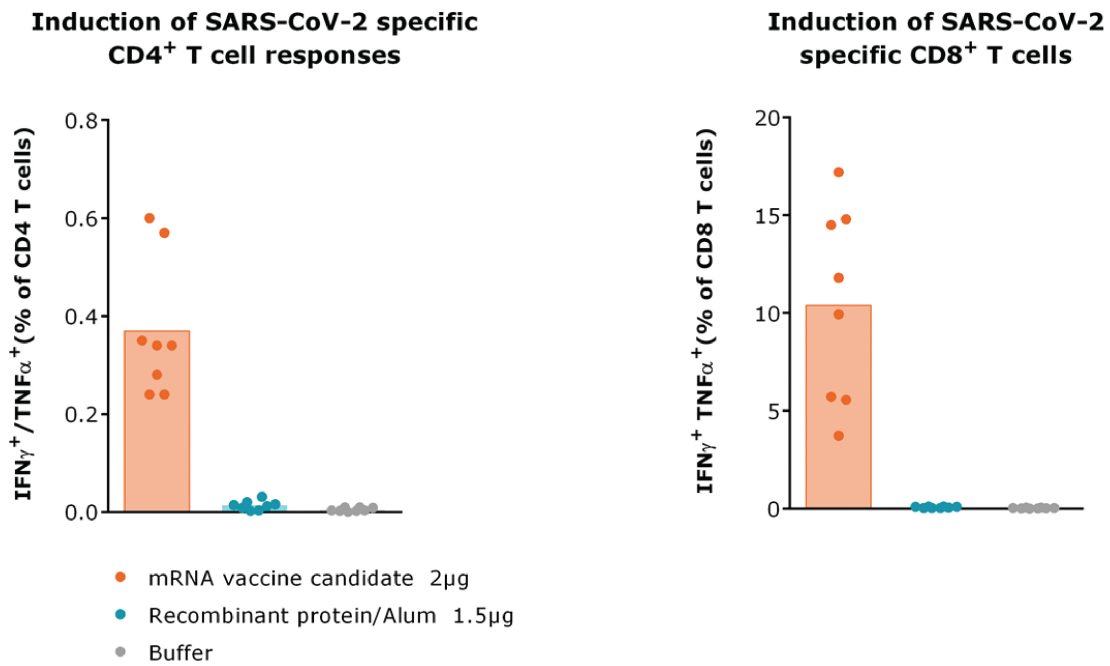


Figure. Mice (n=8) were vaccinated with the SARS-CoV-2 mRNA vaccine (orange columns) or Alum-adjuvanted recombinant full-length Spike protein (extracellular domain) (blue columns) via intramuscular injection on days 0 and 28. On day 49, T cell analysis was performed using FACS. Double positive IFN_γ and TNF_α CD4 and CD8 cells were quantified as percentage of total CD4 or CD8 cell counts, respectively.

One further important aspect for vaccine efficiency is the time of onset of neutralizing antibodies. In mice, the kinetics of VNTs were analyzed and showed that 7 days post second vaccination, VNTs already reached high titers which were at the maximum measured dilution 3 weeks after the second vaccination, as shown in the figure below.

SARS-CoV-2 mRNA vaccine showed rapid onset of neutralizing antibodies after second vaccination

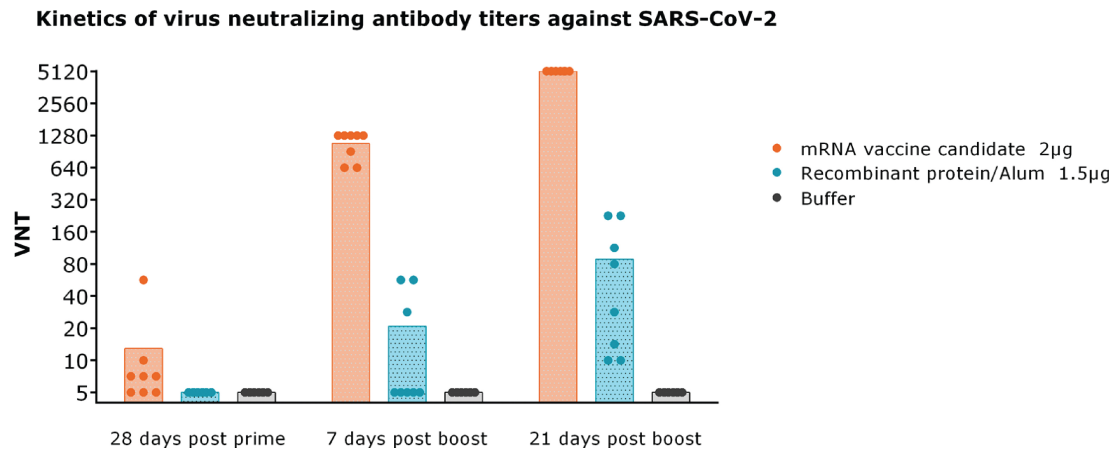


Figure. Mice ($n=8$) were vaccinated with the SARS-CoV-2 mRNA vaccine (orange columns) or Alum-adjuvanted recombinant full-length Spike protein (extracellular domain) (blue columns) via intramuscular injection on days 0 and 28. VNTs (based on CPE measured by microneutralization assay) were measured as indicated. Values from individual animals (dots) and the mean (bars) are reported for each group (buffer control grey column).

In summary, preclinical studies at a low dose of 2µg for our vaccine candidate against SARS-CoV-2 showed a fast induction of a balanced immune response with high levels of VNTs and T cell responses. A balanced immune response represented by high IgG1 and IgG2a titers indicates a significant Th1 response that has been described to prevent the risk of disease enhancement. VNTs are a major criterion supporting that the vaccine candidate has the potential to induce a strong immunologic response to neutralize SARS-CoV-2.

CV-SSIV: Influenza Vaccine

Disease Overview

Influenza is a highly contagious virus that causes mild to severe respiratory virus that can lead to death. According to the CDC, the burden of illness during the 2018-2019 season was estimated to include approximately 35.5 million people getting sick with influenza, 16.5 million people going to a health care provider for their illness, 490,600 hospitalizations, and 34,200 deaths from influenza in the United States. The WHO reports that globally there are as many as five million severe influenza cases annually, leading to as many as 650,000 deaths.

Limitations of Current Influenza Vaccines

Influenza viral infections can be prevented by vaccination although there are several limitations associated with current flu vaccines. Flu vaccines are not always effective, primarily because the influenza virus and its associated antigens undergo mutations or changes in its sequence over short periods of time,

which is called antigenic drift. Vaccines that are developed for the predominant strain infecting people can be rendered ineffective as the virus mutates as it passes from person to person. The process of developing a standard traditional vaccine typically takes approximately eight months from strain identification to doctor's office availability, increasing the likelihood that a significant pool of viruses circulating will be poorly recognized by antibodies in vaccinated individuals. Additionally, vaccine efficacy tends to wane over time. For these reasons, vaccination of the target population needs to be repeated every year before the start of the next influenza season, putting a significant burden on the health system. Furthermore, only a part of the population targeted to get the yearly shot is vaccinated each year, leaving many individuals unprotected.

Our Approach to Influenza Vaccine

We believe that there is a significant market for a more and broader effective vaccine for influenza that protects over several seasons and that, in case of exceptional changes in the circulating strains, could

also be customized to include specific and multiple new strains. We believe that our platform offers the potential for the rapid development of safe and effective vaccines. We believe that the mRNA-based vaccines allows us to address several of the limitations of the currently available seasonal vaccines.

We believe key potential advantages of our approach to traditional seasonal vaccines include:

- Commercial seasonal vaccines usually contain three to four strains of the virus and may offer limited protection as the virus mutates. Adding more strains or further antigens, which can increase or broaden the level of protection conferred by the vaccine, might be an advantage of an mRNA-based vaccine.
- mRNA-based vaccines offer greater production flexibility to adapt to circulating seasonal strains. An mRNA influenza vaccine can be generally produced in under three months from strain identification to a finished GMP product. This rapid vaccine development process would allow treatment of a larger fraction of patients before too many changes are introduced by viral mutations.
- Traditional egg-produced vaccines rely upon high-yielding production strains and often have to contend with egg-adaptation during passage, neither aspects are an issue for mRNA-based vaccination.

We are also developing a Supra Seasonal Influenza Vaccine, or SSIV. We believe that the initial step towards the development of a SSIV is the development of a multivalent, improved seasonal influenza vaccine. Based on performance of our mRNA next-generation influenza vaccine in preclinical studies, including broadening and persistence of immunity, this multivalent formulation could be considered a first-generation multi-year, supra-seasonal influenza vaccine. The characteristics for the mRNA-based seasonal influenza vaccines are a building block in the development of a SSIV where the induction of long-lasting, potent antibody responses, and the possibility to combine several antigens in one vaccine formulation in the absence of antigenic interference are key pre-requisites.

CV-SSIV Overview

Our CV-SSIV contains a mixture of antigens derived from hemagglutinin, or HA, and neuraminidase, or NA, constructs, all from seasonal strains recommended by the WHO, targeting both Influenza A and B strains. The inclusion of NA supports a vaccine with extended breadth, given NA is more conserved compared to HA, and has the potential to confer protection against drifted seasonal but also pandemic strains in upcoming seasons.

Preclinical data for CV-SSIV

As part of our influenza program, we have evaluated mRNA-based influenza vaccines starting with a monovalent influenza vaccine followed by several seasonal multivalent influenza vaccines. Our preclinical experiments have shown that we can encode for multiple targets in our cocktail mRNA vaccines without experiencing immuno-dominance.

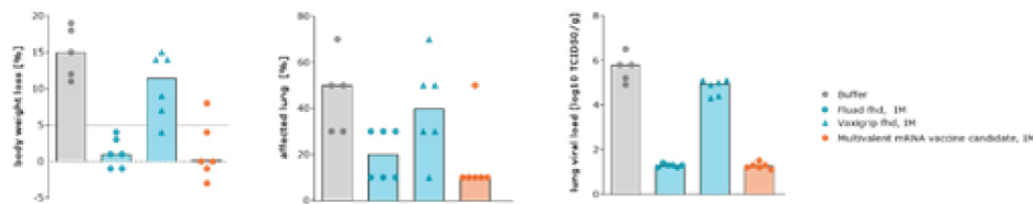
In these preclinical studies, it was demonstrated that our vaccines induced hemagglutinin-inhibition, or HI, titers above the accepted threshold for protective immunity in ferrets. The immunogenicity of the seasonal influenza vaccine was further evaluated in ferrets testing the breadth of antibody response against historic seasonal viral strains. The HI titer induced by mRNA vaccination against specific isolates were comparable to Fluvad produced for the same season. Fluvad is the only licensed adjuvanted seasonal influenza vaccine and has been shown to outperform standard of care split vaccine in older adults and very young children. Retrospective studies of the past season could not show a difference between both types of vaccine.

In immunogenicity studies in ferrets, our multivalent influenza vaccine candidate 2, showed no antigenic interference as judged by HI titer due to the addition of more antigens to multivalent influenza vaccine candidate 1. HI titer against influenza A virus strains were over 1:40 and neutralizing antibody against influenza B virus were detected using a microneutralization assay. Additionally, functional anti-NA antibodies were induced against influenza A strains analyzed using an assay and titers were comparable to

Fluad. Overall, the immune response to influenza A virus were comparable to Fluad, whereas the responses to influenza B virus were lower for our multivalent vaccine candidate 2 than for Fluad. We anticipate that this response will be significantly enhanced in humans who are influenza pre-immune.

As shown in the figure below, the seasonal multivalent vaccine candidate 2 was tested in a ferret challenge infection model. Ferrets were vaccinated with influenza mRNA vaccine candidate two delivered using LNPs or the licensed vaccine Vaxigrip (left light blue column) and adjuvanted vaccine Fluad (right light blue column) via needle-based injection on day 0 and 21 (2-dose regimen). Values from individual animals (dots) and the median (bars) are reported for each group (buffer control grey column). Four weeks after the last vaccination, animals were challenged with influenza A via intratracheal route. Four days after infection, animals were euthanized and virology and pathology was investigated in respiratory tissues. Multivalent vaccine candidate 2 induced better protection in the ferret model than the licensed non-adjuvanted split vaccine (Vaxigrip) and showed comparable activity to the adjuvanted vaccine Fluad.

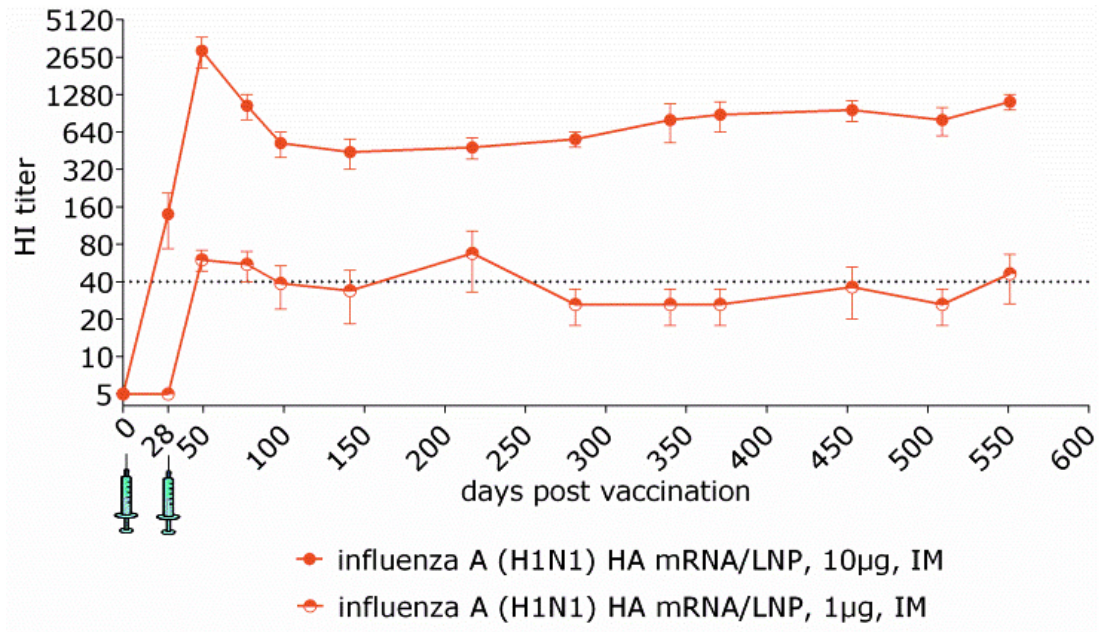
mRNA vaccination candidate protected from weight loss and viral replication comparable to the adjuvanted Influenza vaccine Fluad in ferrets



Ferrets (n=6, female) were vaccinated with a multivalent influenza LNP/mRNA vaccine or the licensed vaccine Vaxigrip and adjuvanted vaccine Fluad®2017/2018 via i.m. needle-based injection on days 0 and 28. Four weeks post last vaccination animals were challenged with 106 TCID50 of influenza A/Netherlands/602/2009 H1N1 via intratracheal route. Four days after infection, animals were euthanized and virology and pathology was investigated: in body weight (A), affected lung tissues (B) and viral titers in the lung (C). Values from individual animals (dots) and the median (bars) are reported for each group.

As shown in the figure below, the longevity of antibody response was evaluated in NHP immunized with a monovalent HA vaccine. Cynomolgus monkeys were vaccinated with 1 or 10 µg LNP-formulated mRNA encoding HA of influenza A via intramuscular needle-based injection on days 0 and 28. Functional antibodies were determined in the serum of the immunized animals at the indicated time points using the HI assay. Our vaccine showed HI titers above the protective threshold (>1:40) for at least 1.5 years following a two-dose primary immunization series.

LNP-formulated influenza A H1N1 HA mRNA vaccine induce high and long lasting functional antibody titers in NHP



Respiratory syncytial virus (RSV) Program

Disease Overview

RSV is a leading cause of respiratory disease globally. The virus causes infections at all ages but young infants have the highest incidence of severe disease. The National Institute of Allergy and Infectious

Diseases estimates that by the age of two years, almost all children will have been infected with RSV in the United States. Globally, RSV has been estimated to cause approximately 33 million cases of RSV-related acute lower respiratory tract infections (LRTI) annually in children less than five years of age, with approximately three million cases requiring hospitalization, and approximately 60,000 dying from complications associated with the infection. In addition, RSV infections can be a significant problem for certain immunocompromised adults and high-risk older adults. Adults at highest risk for severe RSV infection include older adults, especially those 65 years and older, adults with chronic heart or lung disease and adults with weakened immune systems. According to the CDC, RSV is responsible for approximately 177,000 hospitalizations and 14,000 deaths annually in people over 65 years of age within the United States. Market research by GlobalData indicates that the RSV market is expected to grow from \$418.6 million in 2018 to \$5.39 billion by 2028 in the United States, the United Kingdom, France, Germany, Italy, Spain and Japan.

There are no effective RSV vaccines approved to date and the only approved prophylactic treatment is palivizumab, marketed as Synagis in the United States. Synagis is a monoclonal antibody for the prevention of RSV in premature babies or babies with underlying medical conditions of bronchopulmonary dysplasia or congenital heart disease. Synagis's highly restrictive label, combined with the high cost of prophylactic therapy, has limited wider uptake.

Historical Approaches to RSV Vaccines

In 1968, a formalin-inactivated whole RSV vaccine was tested for newly infected and immunized children but was not effective and resulted in vaccine-induced amplification of disease. Since the most severe cases of RSV occur in the first months of life, past approaches have focused on increasing the maternal immune response by developing maternal anti-RSV antibodies. To date, the efforts to develop maternal anti-RSV antibodies through administration of a vaccine have been unsuccessful.

While the reasons for the failure of RSV vaccines to protect against infection remain unclear, the lack of understanding regarding the identity of the natural protective immune response in subjects has challenged the development of an effective RSV vaccine. In certain previous clinical studies, an increase in the immune response has been detected but has not resulted in any further protection against the progression of the RSV infection. Currently, there are several vaccines for RSV in development, including subunit vaccines, attenuated vaccines, and those delivering RSV antigens by recombinant vectors such as vaccinia virus or bovine-based systems.

Our Approach

The surface of RSV contains two glycoproteins: the attachment glycoprotein (G) and the fusion glycoprotein (F). Deletion of RSV G leads to a viable but attenuated virus, indicating that RSV G is not essential for viral entry. In contrast, the RSV F protein is essential to the viral replication process, as it facilitates pH-independent fusion of the viral membrane with the host-cell plasma membrane, leading to infection of the host cell. Expression of RSV F on the surface of cells can also cause fusion with neighboring cells, leading to the formation of multinucleated syncytia. The F protein is expected to induce virus neutralization titer against both subtypes of RSV A and B.

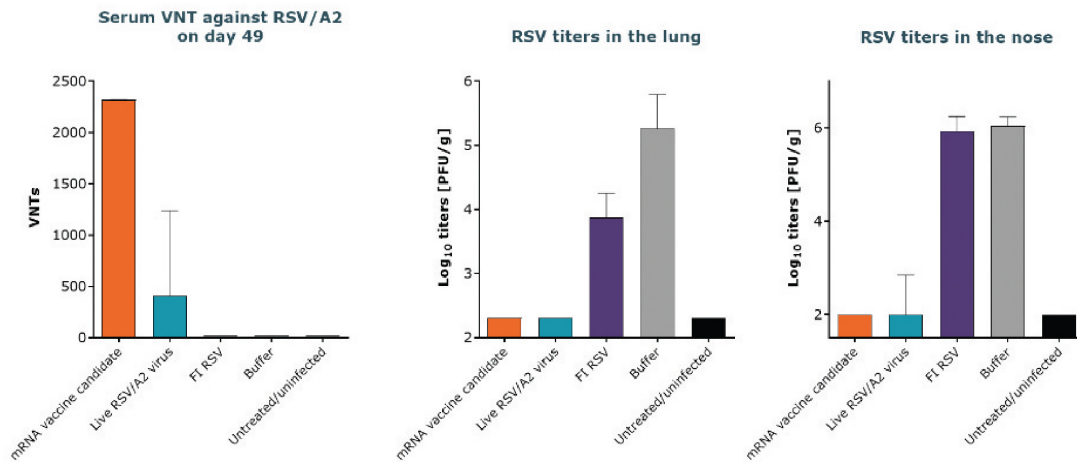
Our approach for the RSV program is based on delivering mRNAs encoding for the RSV F (fusion) protein. This is considered as an advantage over vaccines consisting of the glycoprotein G. Glycoprotein G determines the RSV subtypes and hence, vaccines that aim to protect against all RSV subtypes would need to include a glycoprotein from both RSV A and B each. Therefore, an approach targeting the RSV F as protective antigen has an advantage to target both RSV A and B. Consequently, we have been able to show that our vaccines encoding for RSV F induce high levels of virus neutralizing antibodies, a likely correlate of protection against RSV.

Preclinical Data

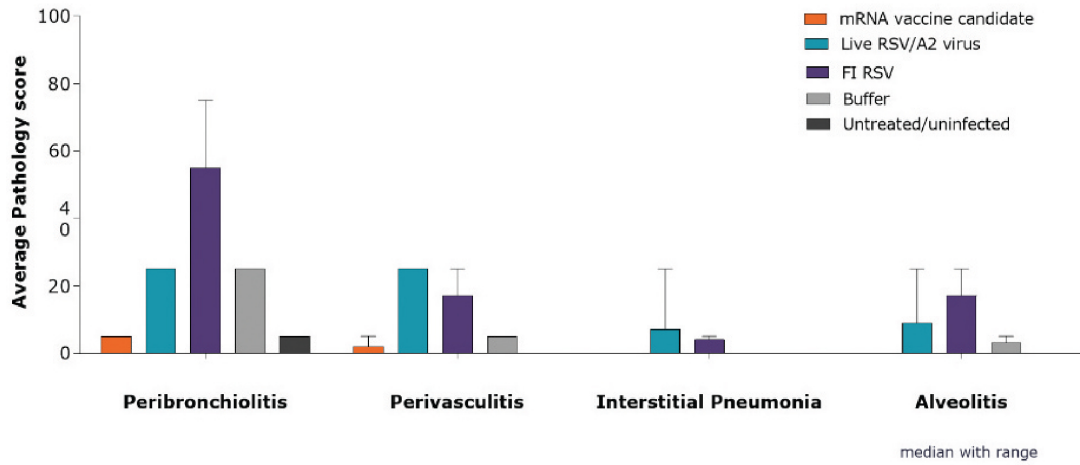
In preclinical studies, we showed that the delivery of our mRNA-based vaccines leads to the stimulation of TLR7, thus supporting affinity maturation of antibodies. In addition, we showed that antigen delivery via mRNA mediates correct protein folding and localization. For our RSV vaccine, we also

analyzed the potential to minimize worsening immunopathology, a phenomenon also known as vaccine-dependent disease enhancement, or VDE, that may also be relevant for other respiratory viral infections such as for the novel SARS-CoV-2. Our RSV vaccine induces a balanced immune response, thus avoiding the Th₂-biased response associated with enhanced respiratory disease or VDE.

In preclinical studies, we have demonstrated that our vaccines encoding for RSV F induce high levels of virus neutralizing antibodies, a likely correlate of protection against RSV. In a cotton rat challenge model, our RSV vaccine was compared to formalin-inactivated virus for evaluating enhanced respiratory disease and live RSV. Cotton rats vaccinated twice at day 0 and day 28 showed high RSV neutralizing antibody titers in the serum 28, 49 or 63 days post vaccination. Animals were challenged with RSV at day 63 and subjected to histopathologic analysis at day 68. The study showed that our RSV vaccine was able to protect lungs from viral replication and significantly reduced viral titers in the nose, when measured using plaque assay 5 days post RSV challenge. Evaluation of signs of VDE were analyzed by lung histopathology FI virus induced peribronchiolitis in cotton rats, which was not detectable in animals vaccinated with our RSV vaccine.



Lung Histopathology



Cotton rats ($n=5$ per group) were vaccinated twice ($d0$ and $d28$) as indicated. RSV neutralizing antibody titers in the serum were analyzed 28, 49 or 63 days post vaccination (top panel). Protection was assessed by measuring viral load in lung and nose at day 5 post RSV challenge (top right panel). Lung histopathology was analyzed at day 68 after animals were challenged with RSV at day 63 (lower panel). Upper graphs show titers measured on day 63.

In this study RSV F encoding vaccine induced high levels of virus neutralizing antibodies, a likely correlate of protection. Functional antibody responses for mRNA vaccinated groups were higher than live

virus vaccinated groups. Protection in lungs and nose are shown in the top right panel (viral titers via plaque assay 5 days post RSV challenge). FI virus induces peribronchiolitis in cotton rats, which is not detectable in animals vaccinated with mRNA.

Other Prophylactic Vaccines for Infectious Diseases

In partnership with the Bill & Melinda Gates Foundation, we are developing prophylactic vaccines for prevention of other infectious diseases associated with high mortality in the developing world including malaria and rotavirus. Preclinical studies are ongoing, with encouraging results, which could lead to the decision for further clinical development of the candidate vaccines.

Furthermore, we are collaborating on several vaccine projects with CEPI, a public-private initiative to strengthen the vaccine research. This focuses on the development of the mRNA Printer, a mobile, automated production unit for rapid mRNA supply. This innovative platform is being designed to provide a rapid supply of LNP-formulated mRNA vaccine candidates that can target known pathogens (including Lassa fever, yellow fever, and SARS-CoV-2) and prepare for rapid response to new and previously unknown pathogens.

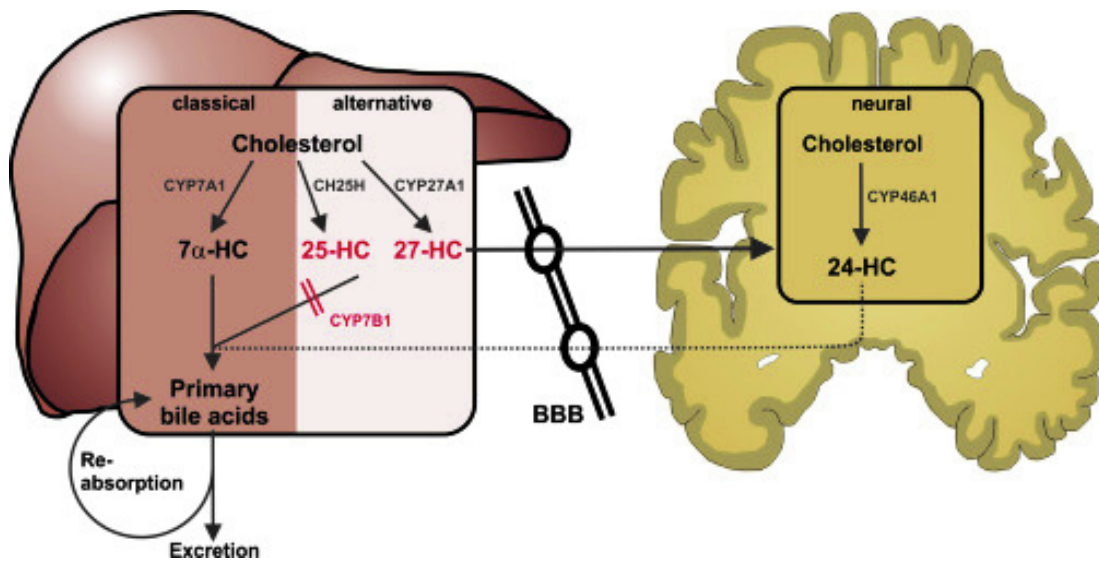
Protein Delivery

Liver and Rare Diseases

mRNA-based protein supplementation offers a therapeutic approach to compensate for lack of proteins in monogenic diseases caused by loss-of function mutations. It offers a potentially curative treatment option, especially in diseases in which the protein is expressed predominantly in organs that can be reached by intravenous delivery (such as the liver). Despite the success of classical enzyme-replacement therapy in several metabolic disorders, this therapeutic approach is not well suited for treatment of diseases caused by the lack of functional intracellular proteins, especially if the proteins are located in or on intracellular compartments. Additionally, as therapeutic proteins are conventionally manufactured by using human, animal, or even plant cells, the pharmacological and biochemical properties of such recombinant proteins may differ from endogenously expressed enzymes. Cellular localization, folding, and post-translational modifications can especially be critical for the correct function of a therapeutic protein. Delivery of mRNA can overcome these limitations and is likely to result in expression of a functional protein at a physiological cellular location. An example of our rare disease approach is for the treatment of hereditary spastic paraplegia, or HSP.

Hereditary Spastic Paraplegia

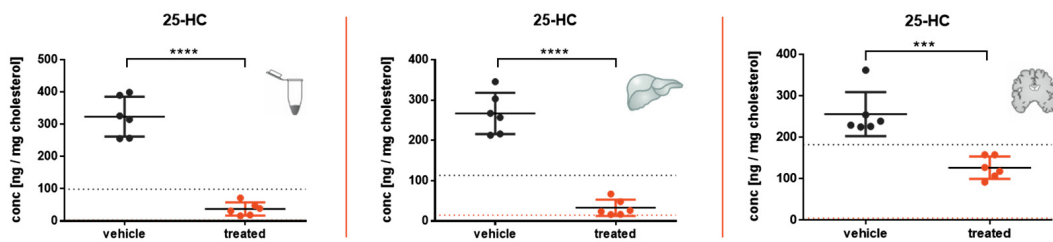
HSP is a group of inherited disorder that are characterized by progressive weakness and spasticity of the legs due to axonal degeneration of the corticospinal tract. Hereditary spastic paraplegia type 5 (SPG5) is caused by autosomal recessive loss-of-function mutations in CYP7B1, a gene encoding for the cytochrome P-450 oxysterol 7- α -hydroxylase, essential for the alternative pathway of bile acid synthesis in liver. Mutations causing SPG5 lead to decreased enzyme activity of CYP7B1 and accumulation of oxysterols in the serum, the liver, and then the central nervous system. The accumulation of hydroxyl cholesterol, or HC, in the brain is what is believed to be the pathologic correlate of this particular disease, which leads to spasms and paraplegia as symptoms. To date, no curative treatment for SPG5 is available. Current clinical treatment strategies for SPG5 are based on the reduction of cholesterol by applying cholesterol-lowering drugs (statins), which consequently lead to a reduction of oxysterols.



Our approach is based on replacement of CYP7B1 by administration of mRNA. We have studied the intravenous application of formulated CYP7B1 mRNA in mice lacking the endogenous *Cyp7b1* gene. Comparable to the human situation in SPG5 patients, a drastic increase of these oxysterols was detected in all three compartments (serum, liver and brain) of knockout mice. Using this *in vivo* model, we were able to demonstrate that a therapeutic approach with mRNA can restore human CYP7B1 protein that exhibits physiological function and eliminates abnormal cholesterol metabolites.

As shown below, we investigated the safety and efficiency of repeated dosing with four consecutive doses of 40 µg LNP-encoded mRNA of CYP7B1 administered intravenously every 5 days. LNP loaded with a non-translating mRNA were applied as control (vehicle). Prior to the administration, serum samples were taken to determine basal oxysterol levels. Two days after the last injection (17 days of treatment), animals were sacrificed, and serum, liver, and brain samples were analyzed. Oxysterol analysis of these samples demonstrated a significant decrease of 25 hydroxy cholesterol, or 25 HC, in the serum and liver. mRNA expression of the human CYP7B1 in the liver led to a reduction of 25 HC in the liver by 8-fold and in serum by approximately 88%. These effects are accompanied by a reduction of the accumulation of 25 HC in the brain by more than 50%. Additionally, repetitive treatment resulted in a significant decrease of 27-HC and 3β-HCA in livers of treated compared to vehicle animals.

In addition, repeat intravenous delivery of CYP7B1 mRNA was found to be well tolerated in this study. Neither the CYP7B1 mRNA nor the restored protein nor the LNP induced liver toxicity. None of the treated animals presented signs of toxic or adverse effects. LNP particles encapsulating non-coding mRNA led to a temporary increase oxysterol levels (25-HC and 27-HC) in liver and serum in the vehicle group, which is expected given cholesterol is an essential component of LNPs.



Lysosomal Storage Disorders

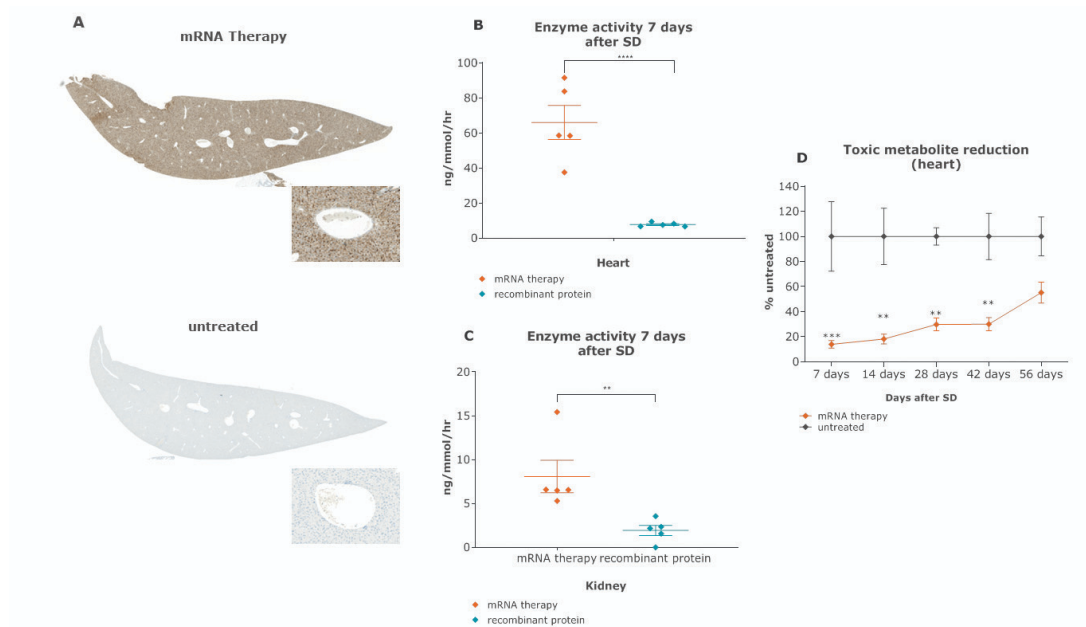
We continue to leverage our expertise in liver delivery technology by focusing on inherited rare diseases associated with metabolic disorders of the liver and lysosomal storage diseases. As a group, these

diseases are well-defined, single-gene disorders that are amenable to correction by systemic mRNA therapy.

We have conducted preclinical studies in an undisclosed lysosomal storage disease, or LSD, to evaluate LNP delivery of mRNA encoding the deficient enzyme to the liver, production of the enzyme by the liver, and subsequent secretion and systemic distribution of the enzyme to the primary organs affected by the disease. In this specific LSD, the enzyme deficiency results in a progressive accumulation of lipid in cellular lysosomes, which ultimately affect the functioning of the heart and kidneys. Enzyme replacement therapy, or ERT, which involves intravenous administration of recombinant enzyme, has been the standard of care for this specific LSD. In contrast to ERTs, our LNP mRNA technology specifically and efficiently targets the liver to naturally produce the missing enzyme, which is subsequently secreted into the bloodstream and distributed to the affected organs. In this specific LSD, the liver is not the target organ, but is used to produce the endogenous native enzyme.

As shown below, LNP delivered mRNA therapy produces a high and homogenous expression of the missing enzyme in the livers of knockout mice (Figure A, brownish stain). The endogenously produced enzyme is then secreted into the bloodstream with a better pharmacokinetic profile than the injected recombinant protein. The enzyme is then taken up by the target organs to be treated. In this example, the enzyme is taken up by the heart (Figure B) and kidney (Figure C) and localized into the lysosomes. Our mRNA therapy, through prolonged synthesis and secretion by the liver, led to higher enzyme activity in the

organs compared to the infused recombinant enzyme (Figures B and C). This higher enzyme activity leads to a significant and prolonged reduction of accumulated lipids in the organs of mRNA-treated animals (Figure D).



Liver-Specific Metabolic Diseases

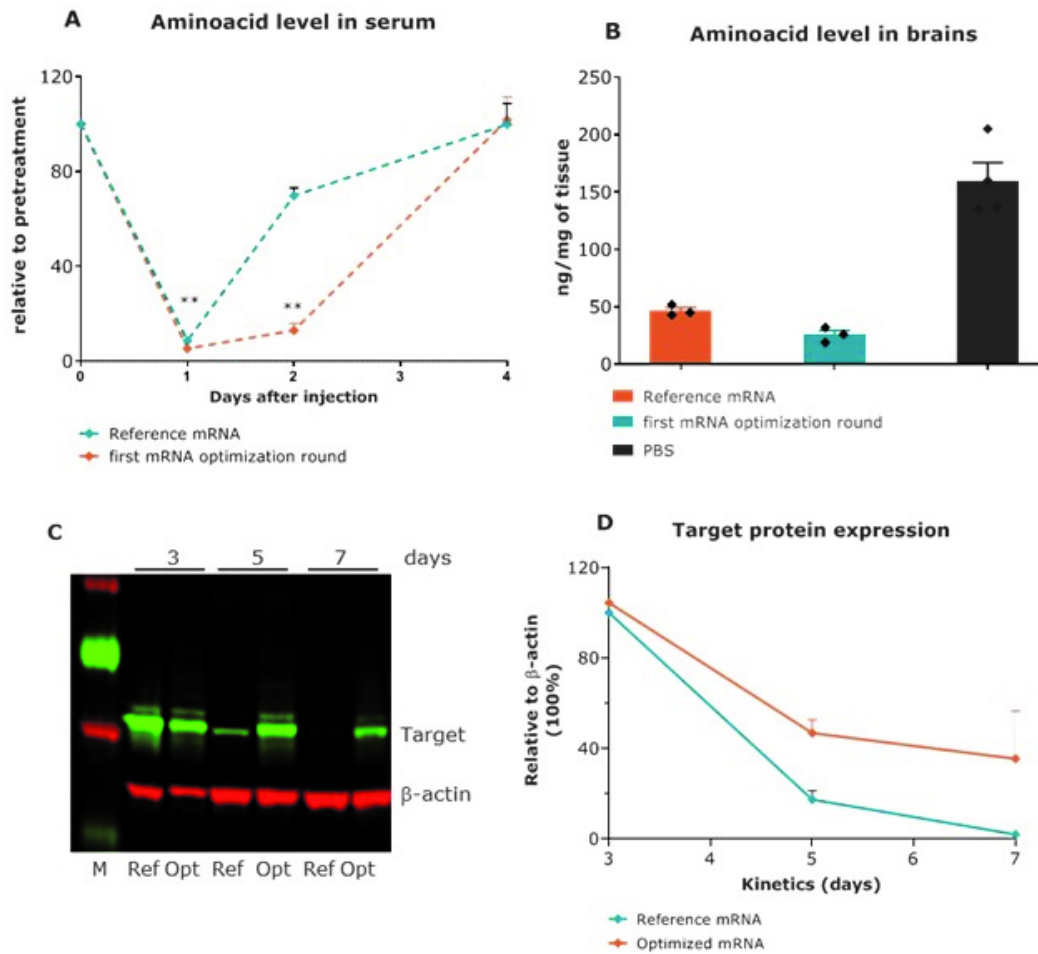
We are applying a similar approach to multiple undisclosed programs focused on inherited liver-specific metabolic disorders of amino acids, nitrogen, and essential nutrients. The goal of these rare disease programs is to restore the specific enzyme or protein that is deficient in the liver by LNP-mediated delivery of mRNA to the liver. As such, the target organ for correction is the liver, and secretion and systemic distribution of the enzyme or protein to other organs is not required for a therapeutic effect.

Our ability to optimize mRNA stability and translation, in combination with optimization of the expressed protein, is an important part of our technical expertise. Using a process of mRNA and protein optimization, we believe that we are able to extend the duration of protein expression to meet a defined target product profile.

One example of this technology is the mRNA therapy that we are developing for a metabolic amino acid disorder. In this inherited disorder, a liver-specific intracellular enzyme is deficient resulting in decreased metabolism of the amino acid. As a result, there is a toxic build-up of the amino acid in the blood, which leads to severe consequences for the central nervous system.

A single intravenous injection of a liver-targeted LNP formulation containing the therapeutic mRNA leads to a marked decrease in the level of the amino acid in the sera of knockdown animals (Figure A), but also in the brain (Figure B). To maximize the therapeutic window to reach the desired target product profile, several rounds of mRNA and protein optimization were subsequently performed. Improving the mRNA molecular structure during the first round of optimization prolonged the protein and its therapeutic effect (Figure A) compared to the reference mRNA. Protein optimization (Figures C and D) of the expressed target enzyme increased its expression/stability and/or activity *in vitro*. The combination of both

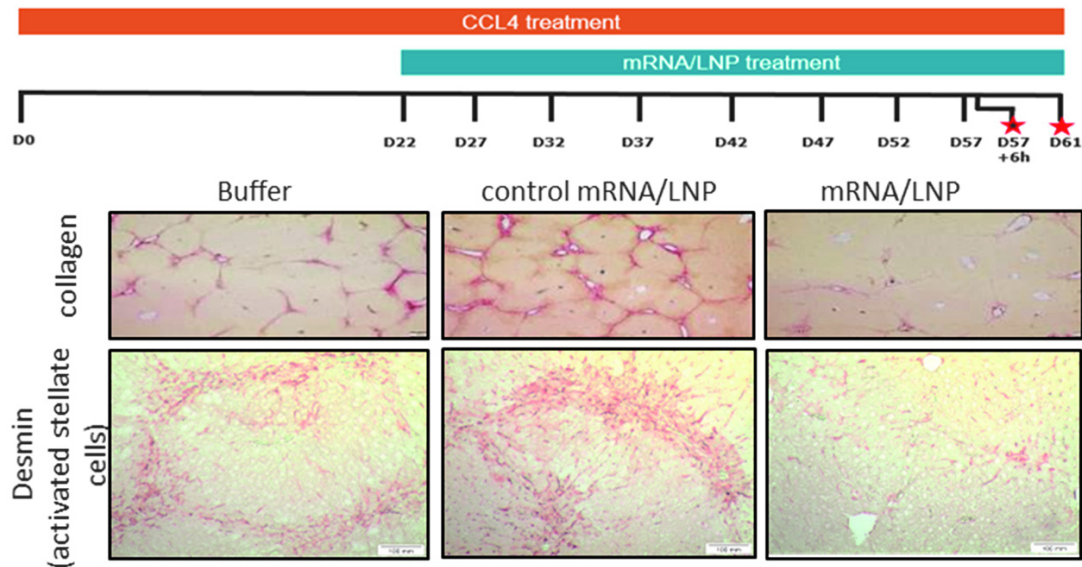
optimization programs resulted in a candidate with improved characteristics before entering into further development.



Fibrotic Liver Diseases

According to published literature, chronic liver diseases cause 2 million deaths a year worldwide. Leveraging efficient liver delivery technology, we are developing our programs focused on treating liver diseases. We have shown that the delivery of liver-specific protein factors, which are down regulated in fibrosis, can resolve liver fibrosis, a key pathological feature of NAFLD, NASH, cirrhosis and hepatocellular carcinoma. Protein factor treatment of liver diseases is uniquely suited to mRNA medicines enabling the expression of intracellular proteins. Moreover, we believe that in this particular case, the LNP technology allows us to deliver mRNA almost exclusively to the target cells, hepatocytes.

In a CCL4 chemically-induced mouse model of liver fibrosis, we delivered eight doses of LNP-mRNA at an interval of 5 days at 2 mg/kg. The figure below illustrates the ability of an mRNA-delivered protein factor to reduce collagen, the main fibrotic material deposited in fibrosis, and eliminate activated stellate cells, the source of collagen (stained red). To confirm the potential activity of this mRNA therapy, we obtained similar data in two other unrelated murine models: a diet-induced model and a knockout mouse model of liver fibrosis. These findings offer preclinical proof of concept for this therapeutic concept to treat acute and chronic liver diseases, as well as diseases of other organs.

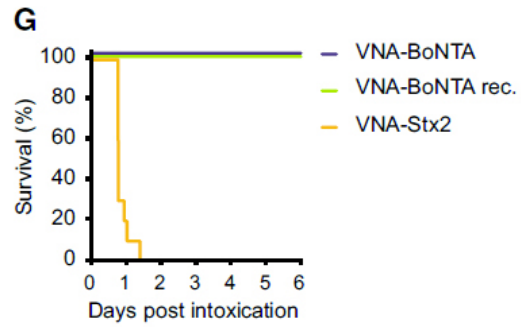
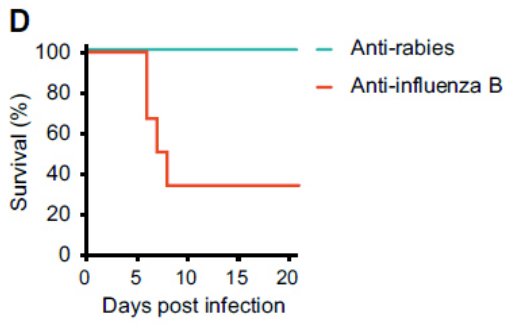


Therapeutic Antibodies

mRNA has potential to promote expression without inducing an adverse immune response against the encoded protein. We have tested various antibodies using different designs to evaluate our platform's potential for prophylactic and therapeutic antibodies.

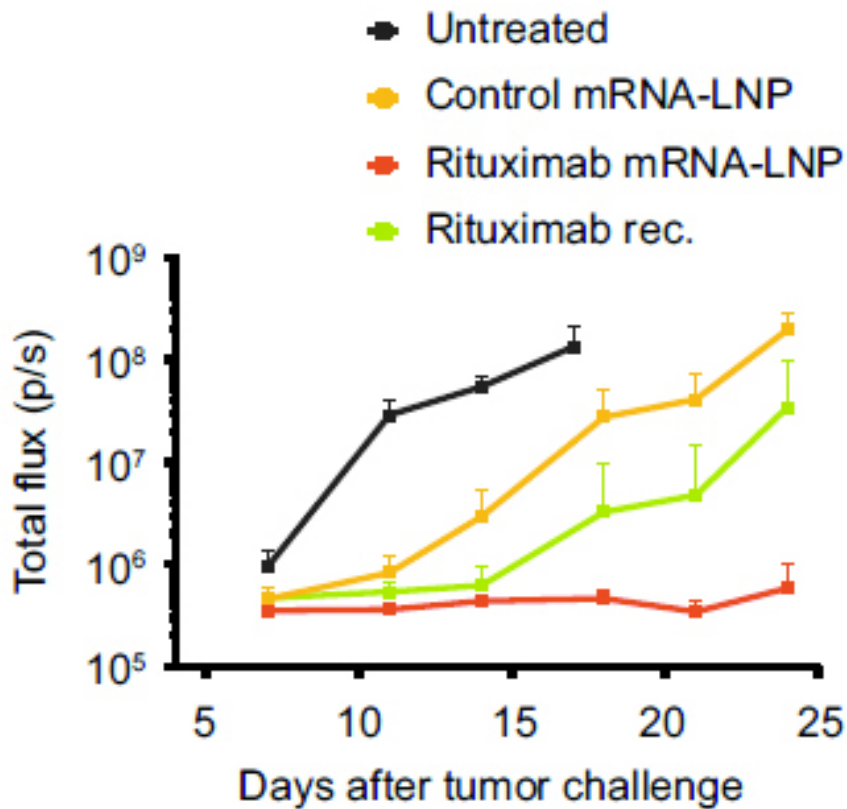
We evaluated the use of mRNA for passive immunization in two indications, rabies and botulism, that can be considered prototypes for anti-pathogen and anti-toxin therapies, respectively. Single injections of mRNA-LNPs were sufficient to establish rapid, strong, and long-lasting serum antibody titers *in vivo*, thereby enabling both prophylactic and therapeutic protection against lethal rabies infection or botulinum intoxication. In both models, the high levels of *in vivo* serum expression conferred full protection in pre- and post-exposure scenarios.

The left side of the below graphic shows that mice expressing the anti-rabies mAb survived, whereas the majority of control animals which received anti-influenza mAb mRNA succumbed. The right side of the below graphic shows that mice treated post-intoxication with VNA-BoNTA mRNA or recombinant VNA-BoNTA also survived.



We have also demonstrated that mRNA-mediated antibody expression may be effective in the field of cancer immunotherapy, where mAbs are widely used in medical practice. In a preclinical study conducted in mice, we compared the efficacy of rituximab-encoding mRNAs to recombinant rituximab. We inoculated mice intravenously with luciferase expressing Raji lymphoma cells and started treatment with 50 μ g of mRNA-LNP encoding rituximab and 200 μ g of recombinant rituximab at various time points. mRNA-LNPs coding for an irrelevant antibody were used as further control. Control animals revealed strong tumor cell proliferation and had to be euthanized 17 days after inoculation due to severe symptoms. As shown in the

picture below, repeated administration of mRNA-LNP for rituximab strongly decelerated or even abolished tumor cell growth compared to continued tumor growth for recombinant rituximab.



Eye Diseases

With the development of the CVCMM delivery system, we were able to begin exploring the treatment of eye and lung diseases with mRNA therapy. We have strategic collaborations with SERI for the development of mRNA-based treatments for currently undisclosed eye indications. We believe that the treatment of eye diseases with mRNA therapy represents an excellent opportunity for the mRNA approach for the following reasons:

- Therapeutic protein can be produced directly and locally within the target tissue;
- Local treatment in the eye requires lower mRNA doses, thereby minimizing systemic exposure;
- Enables production of endogenous proteins to stop or prevent pathological processes locally in the eye, such as neo-vascularization or apoptosis;
- Enables expression of multi-domain intracellular or transmembrane proteins in key cells within the eye overcoming limitations of recombinant proteins;
- No concern with potential side-effects typical for viral gene vector;
- No mRNA construct size restrictions as with viral gene vectors; and
- The eye is an immune-privileged organ.

Our proprietary CVCMM delivery system allows for different routes of delivery, include subretinal and intravitreal injections, of our mRNA-based medicines for the treatment of different eye diseases. The subretinal route provides access to specific cell subpopulations such as photoreceptors, while the intravitreal

route allows access to larger cell populations which can be used as a local bioreactor to produce therapeutic proteins in the eye.

SUBRETINAL INJECTIONS

Enable:

- local administration
- access to specific cell sub-populations (e.g. photoreceptors)
- gene editing
- protein supplementation

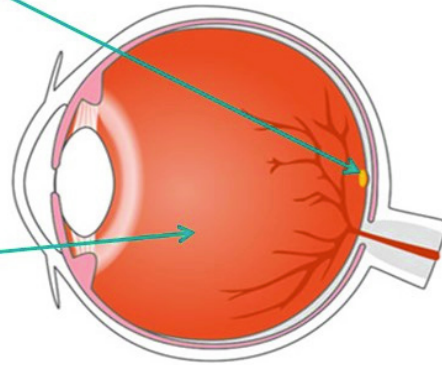
safe alternative to viral systems

INTRAVITREAL INJECTIONS

Enable:

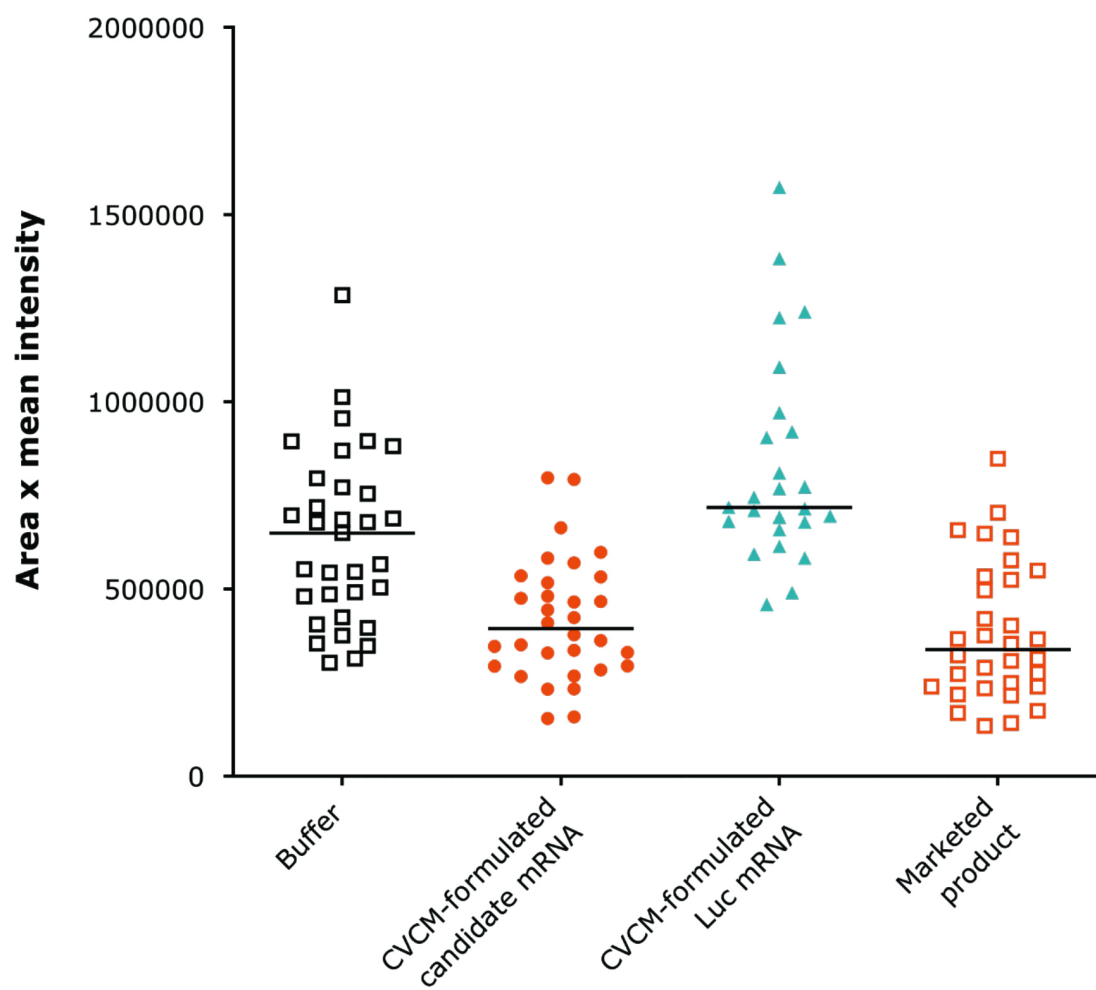
- access to larger cell numbers, which can be used as **bioreactor** to produce:
 - antibodies
 - endogenous angiogenesis antagonists
 - anti-apoptotic signals

alternative to recombinant proteins



In vivo studies showed that intravitreal injection of CVCM-based mRNA formulations expressed high levels of fluorescent protein in both rat and rabbit eyes. This route of administration might potentially allow the expression of secreted therapeutic proteins within the eye. Similar expression of fluorescent protein was achieved following intraretinal injection of CVCM-formulated mRNA in rats.

To further optimize the CVCM delivery system for ocular administration, formulations containing mRNA encoding product candidates were tested in a rat model. The animal model has been used in the development of therapeutics to treat retinal diseases. Multiple intravitreal injections of the CVCM-based mRNA formulations were well-tolerated. As shown below, administration of CVCM formulated with mRNA encoding for product candidates at a 5 μg dose showed comparable inhibitory activity to currently marketed products at the applicable labeled dose.

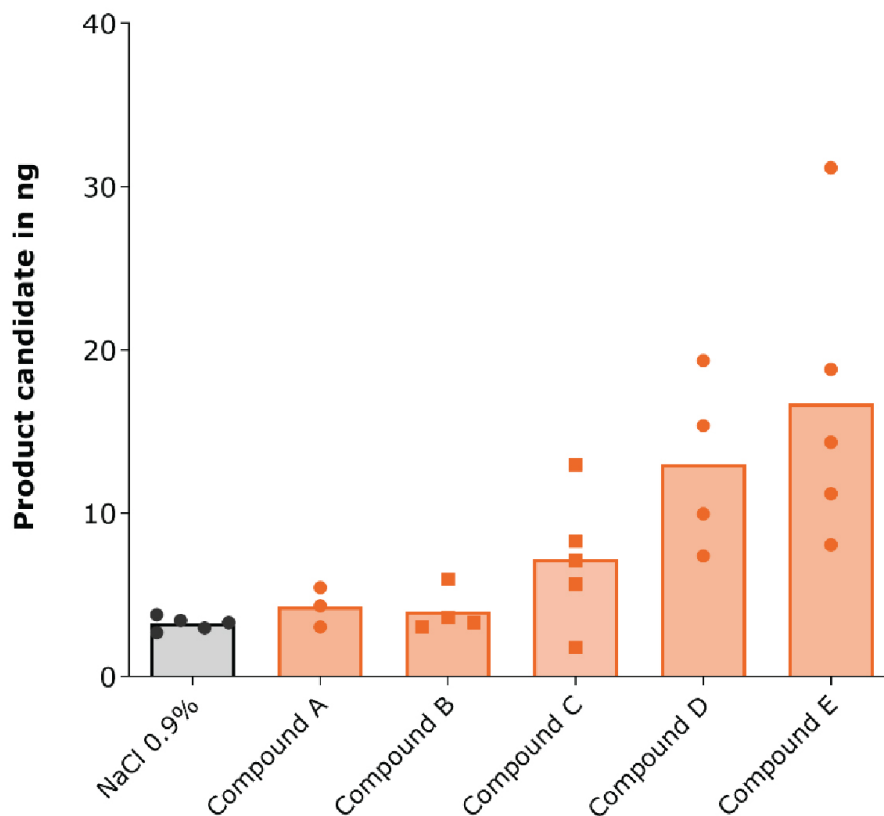


Based on the positive preclinical data demonstrating efficient delivery of mRNA to the eye using the CVCM delivery system, the agreement and collaboration with SERI moved ahead. We believe that the clinical and research expertise in eye diseases at SERI would allow us to fully leverage our mRNA and CVCM delivery technology in the discovery and validation of eye disease targets amenable to mRNA treatment. In collaboration with SERI, a high priority rare eye condition has been identified for development. Multiple therapeutic targets have been identified for this condition and mRNAs have been generated and are currently being tested in preclinical studies.

Lung Diseases

The CVCM delivery system is also well suited for the delivery of mRNA to the lung administered as either an aerosol or a dry powder formulation. Proof-of-concept *in vivo* animal studies showed that CVCM mRNA formulations, administered using the intrapulmonary route, were able to transfect airway epithelial cells and produce functional therapeutic proteins in the lung. Levels of product candidate were determined in broncho-alveolar lavage fluid (BALF) collected 12 hours after instilling different CVCM-based mRNA formulations encoding for the target protein. As shown in the below graphic, Compounds A through E showed increased levels of expressed product candidates in the murine lung compared to a control (NaCl).

Levels of Expressed Product Candidate in 50µl of BALF, 12h



Our agreement with Yale University leverages Yale's leadership in lung discovery research with our technical capability to deliver mRNA to the lung, where it would express therapeutic proteins. The goal is to discover of novel molecular targets in pulmonary diseases that could potentially be treated with mRNA therapy. With the Yale investigators, we have identified a high priority pulmonary disease indication to pursue together with a novel therapeutic target for the treatment of the disease. Additional studies will explore new mRNA therapeutic targets to treat the disease.

Competition

We participate in an industry that is characterized by a rapidly growing understanding of disease biology, quickly changing technologies, strong emphasis on proprietary products, and a multitude of companies involved in the creation, development and commercialization of novel therapeutics. These companies are highly sophisticated and often collaborate strategically with each other.

We are developing a broad portfolio product candidates that, coupled with our capabilities across mRNA technology, development and manufacturing, we believe position us at the forefront of targeted immune active and immune silent mRNA-based medicines. However, we compete with a wide range of pharmaceutical companies, biotechnology companies, academic institutions and other research organizations for novel therapeutic targets, new technologies, talent, financial resources, intellectual property rights and collaboration opportunities. As such, many of our competitors and potential competitors have substantially greater scientific, research and product development capabilities as well as greater financial, manufacturing, marketing and human resources than we do. In addition, there is intense competition to establish clinical trial sites and register patients for clinical trials. Many specialized biotechnology firms have formed collaborations with large, established companies to support the research, development and commercialization of products that may be competitive with ours. Accordingly, our competitors may be more successful than we may be in developing, commercializing and achieving widespread market acceptance. In addition, our competitors' products may be more effective or more effectively marketed and sold than any treatment we or our development partners may commercialize and may render our product candidates obsolete or noncompetitive before we can recover the expenses related to developing and commercializing any of our product candidates.

There are additional companies that are working on potential mRNA medicines. Companies with clinical programs with mRNA include BioNTech, Moderna, eTheRNA Immunotherapies, Translate Bio, GlaxoSmithKline Sanofi, AstraZeneca and Merck & Co. and those with preclinical programs include Arcturus Therapeutics, Ethris and Genevant Sciences. Specifically, the oncology therapeutics landscape in general is highly competitive and includes large and specialty pharmaceutical and biotechnology companies, academic research institutions and governmental agencies and public and private research institutions. It includes both competition from marketed therapies as well as potential new therapeutics in development. We may compete with products with different mechanisms of action as well as against established standards of care. We expect our intratumoral immunotherapy candidates for the treatment of solid tumors to face direct competition from companies such as Moderna and BioNTech in collaboration with Sanofi in addition to several non-mRNA based approaches.

Collaborations

We have entered into various licensing and commercialization agreements, including the following agreements with respect to product candidates:

GlaxoSmithKline Collaboration and License Agreement

In July 2020, we entered into the GSK Agreement, pursuant to which we will collaborate with GSK to research, develop and commercialize prophylactic and therapeutic non-replicating mRNA-based vaccines and antibodies targeting infectious disease pathogens. Under the terms of the GSK Agreement, we granted GSK a worldwide exclusive, sublicensable (subject to certain conditions) license under certain of our intellectual property relating to vaccines and antibodies encoded by our proprietary mRNA targeting certain selected pathogens, or GSK Program Products, and a non-exclusive license under certain LNP technology to develop, manufacture and commercialize a certain number of such GSK Program Products for use in connection with the infectious diseases targeted under the GSK Agreement. We additionally granted GSK an exclusive option for a certain period to add additional products in the field of infectious diseases as GSK Program Products. GSK is permitted for a certain period to replace any of the GSK Program Products with an alternative product, up to a certain number of times, and to exchange any antigen or antibody for which we have granted GSK a license under LNP technology for an alternative antigen or antibody, up to a certain number of times. In the event we obtain rights to any intellectual property controlled by a third party that is useful but not necessary for the development, manufacture or commercialization of the GSK Program Products, we must, at GSK's election, use commercially reasonable efforts to obtain a sublicense to such rights on behalf of GSK. Under the terms of the GSK Agreement, GSK granted us a royalty free, non-exclusive license under certain GSK-controlled technology to perform certain development and manufacturing activities under the GSK Agreement.

For a certain period after the effective date, GSK has the right to reserve up to a certain number of antigens and we and our affiliates will be prohibited from granting any rights to a third party with respect to any such antigen for use in connection with infectious diseases. Under the terms of the GSK Agreement,

GSK and its affiliates and sublicensees and we and our affiliates are additionally prohibited from developing, manufacturing or commercializing, directly or indirectly, any prophylactic or therapeutic mRNA-based vaccine or mRNA-based antibody targeting a pathogen targeted by a GSK Program Product, other than as contemplated under the GSK Agreement. Such exclusivity obligation will continue on a pathogen-by-pathogen basis for the duration of the GSK Agreement, so long as such pathogen is targeted by a GSK Program Product. We are additionally prohibited from granting any third party any license under the licensed LNP technology, or using such LNP technology ourselves, in connection with any GSK Program Product for so long as such GSK Program Product is being developed or commercialized under the GSK Agreement, except as contemplated under the GSK Agreement. We are additionally prohibited, for the period during which GSK's option to license additional GSK Program Products remains outstanding, from commercializing or granting any third party the right to develop or commercialize any prophylactic or therapeutic mRNA-based vaccine or mRNA-based antibody targeting certain pathogens for use in connection with infectious diseases.

We and GSK are required to complete certain development activities with respect to the GSK Program Products set forth in various development plans. Amongst other development responsibilities, we are required to provide clinical supply and will in principle be responsible for sponsoring Phase 1 clinical trials for the GSK Program Products. We will be required to make certain manufacturing facility enhancements and, at the request of GSK, we must negotiate and agree in good faith on a commercial supply agreement pursuant to which we will reserve certain manufacturing capacity for GSK. At GSK's request, we are required to transfer to GSK all know-how necessary for GSK's development activities under the GSK Agreement and all know-how necessary for the manufacture of the GSK Program Products. GSK is generally responsible for development activities following completion of Phase 1 clinical trials and is required to use diligent efforts to secure marketing authorization following completion of all necessary clinical trials. GSK is responsible for the commercialization of approved GSK Program Products in all countries other than Austria, Germany and Switzerland and is required to use diligent efforts to commercialize approved GSK Program Products in certain major market countries. At our request, we and GSK will negotiate and agree in good faith to a distribution agreement pursuant to which we will have the exclusive right to commercialize GSK Program Products in Austria, Germany and Switzerland, and we will pay GSK royalties at the rate set out below. We and GSK are required to provide development data to the other party through a joint steering committee.

GSK is required to pay us an upfront payment of €120 million and a manufacturing capacity reservation fee of €30 million following a certain regulatory milestone event, which is creditable against future milestone payments. We are eligible to receive up to between €28 million to €45 million in development milestone payments, €32 million to €35 million in regulatory milestone payments and €70 to €100 million in commercial milestone payments, depending on the GSK Program Product. Upon each exercise of its option to add additional products as GSK Program Products, GSK is required to compensate us for certain development costs and pay any accrued milestone payments. If GSK exercises its right to replace a GSK Program Product and if the replacement product was already under development by us, GSK must compensate us for certain development costs and pay any accrued milestone payments. We are eligible to receive tiered royalty payments ranging from a single-digit percentage to a low teens percentage on net sales, subject to certain customary reductions. GSK's royalty obligations continue on a product-by-product and country-by-country basis until the later of (i) the expiration of the last to expire valid claim covering such product in such country, (ii) the earlier of expiration of regulatory exclusivity for such product in such country or 12 years following the first commercial sale of such product in such country or (iii) ten years following the first commercial sale of such product in such country provided our proprietary know-how is required for such product. In any event, GSK's royalty obligations with respect to a product will expire in all countries no later than 20 years following the first commercial sale of such product in any country in which GSK is responsible for the commercialization of approved GSK Program Products. GSK is required to compensate us for certain development and regulatory costs we may incur in connection with our performance of our obligations under the GSK Agreement and we are eligible to receive up to €20,000 in reimbursements for expenses incurred recording or registering the licenses granted under the GSK Agreement. Under any distribution agreement entered into between us and GSK in connection with our distribution of a GSK Program Product in Austria, Germany and Switzerland, we will be required to purchase supply from GSK and pay GSK a low thirties percentage royalty on net sales. As of the effective date of the GSK Agreement, we have not received any payments under the GSK Agreement.

The commencement of the GSK Agreement is conditioned on completion of GSK's equity investment in us, unless such condition is waived by either party. The term of the GSK Agreement will continue until the expiration of the last-to-expire royalty term, unless terminated earlier by either party. GSK has the right to terminate the GSK Agreement in its entirety or on a program-by-program basis for convenience following a certain notice period. We and GSK both have the right to terminate the GSK Agreement on a program-by-program basis before the first commercial sale of a GSK Program Product under such program in the event of the other party's material breach following a cure period or after the first commercial sale of a GSK Program Product under such program if the other party fails to make any payments due, commits any willful and material breach of the restrictions on any license granted to such party, commits a material breach of its non-compete obligations or commits a persistent and material breach of its confidentiality obligations following a cure period. We additionally have the right to terminate on a program-by-program basis after the first commercial sale of a GSK Program Product under such program if GSK commits a material breach of its commercialization diligence obligations following a cure period.

Upon expiration, the licenses granted to GSK under the GSK Agreement will become fully paid-up, perpetual and non-exclusive. In the event GSK terminates the GSK Agreement or a program under the GSK Agreement for convenience or we terminate a program under the GSK Agreement for cause, we will have the right to elect to continue with the development and commercialization of such program ourselves. If we decline to continue with the development and commercialization of a terminated program, all licenses granted under the GSK Agreement will terminate. If we elect to continue with the development and commercialization of a terminated program, all licenses granted by us to GSK will terminate and GSK must grant us an exclusive license under any intellectual property developed under the GSK Agreement and, at our election, a non-exclusive license under technology which was used by GSK for the development, manufacture or commercialization of such terminated product. In the case of termination for GSK's convenience and if we elect to obtain such non-exclusive license, we will be required to pay GSK a single-digit percentage royalty on net sales. In the case of our termination for cause, the grant of rights and transition of the assets from GSK will be subject to a payment to GSK to be mutually agreed by the parties. In the event GSK terminates a program under the GSK Agreement for cause, GSK will have the right to elect to continue the development and commercialization of such program. If GSK declines to continue with the development and commercialization of a terminated program, all licenses granted under the GSK Agreement will terminate. If GSK elects to continue development and commercialization, all licenses granted to GSK under the GSK Agreement will survive termination and all payment obligations will remain in effect except that GSK will have the right to suspend payments until the amount of damages suffered by GSK has been agreed and set off against such payments.

Genmab Collaboration and License Agreement

In December 2019, we entered into the Genmab Agreement to research and develop up to four potential differentiated mRNA-based antibody products, to be selected by Genmab, based on the combination of our proprietary RNAntibody technology with Genmab's proprietary antibody technology for the treatment of human diseases. Pursuant to the Genmab Agreement we granted Genmab an exclusive, worldwide, sublicensable (subject to certain conditions) license under our mRNA technology for the development, manufacture and commercialization of an mRNA antibody product designed to express a certain Genmab proprietary antibody, which we refer to as the Genmab First Program. The parties will collaborate on research to identify an initial product candidate under the Genmab First Program. We additionally granted Genmab an exclusive, worldwide, sublicensable license under our mRNA technology for the research and preclinical development of up to four additional mRNA antibody product concepts and an option to obtain an exclusive, worldwide, sublicensable (subject to certain conditions) license to develop, manufacture and commercialize product candidates for up to three of such product concepts. We have the option to share in the costs and profits in connection with the development, manufacture and commercialization of one of the additional mRNA antibody product concepts under predefined terms and conditions.

We may not, directly or indirectly, offer any rights to a third party under the technology we license to Genmab for the product concepts and targets being developed under the Genmab Agreement or conduct or participate in the development, manufacture or commercialization of any antibody product that is directed at a target being developed under the Genmab Agreement. For the Genmab First Program, these

obligations will last for the duration of the Genmab Agreement. For the additional product concepts certain time limitations apply to the above obligations. Genmab may not develop or commercialize any mRNA-based single antibody product or monoclonal recombinant antibody that is based on the Genmab First Program outside of the scope of the Genmab Agreement.

In partial consideration for entering into the Genmab Agreement, Genmab was required to pay us an upfront fee of \$10 million and made a €20 million equity investment. Genmab additionally will be obligated to pay us a \$0.5 million reservation fee upon the selection of each additional product concept for development and \$5 million upon selection of a product from the Genmab First Program for further development and commercialization. Genmab is additionally required to pay us up to \$30 million in option exercise fees. If Genmab exercises any of its options to obtain commercial licenses for the additional mRNA antibody concepts, Genmab would fund all research and would develop and commercialize any resulting product candidates. We are additionally eligible to receive up to between \$25 million and \$43 million in development milestone payments, \$100 million and \$125 million in regulatory milestone payments and \$150 million and \$200 million in commercial milestone payments for each product, depending on the specific product concept. In addition, we are eligible to receive a mid single-digit to low teens percentage tiered royalty on aggregate net sales of licensed products, on a per product basis and subject to certain customary reductions. Genmab's royalty obligation continues on a country-by-country and product-by-product basis until the later of the expiration of the last-to-expire valid claim in the licensed patents in such country covering such licensed product, expiration of regulatory exclusivity for such product in such country or ten years from the date of the first commercial sale of such product. If Genmab grants a sublicense to the Genmab First Program product before a certain milestone event, Genmab must pay us a one-time \$10 million payment. We are responsible for a portion of the overall costs for development with respect to the Genmab First Program product until submission of an IND within an agreed budget, and Genmab will otherwise reimburse us for costs incurred in performing certain development activities in connection with the Genmab Agreement. We are responsible for any payments to third parties related to the LNP technology we license to Genmab for use in relation to the Genmab First Program and a portion of such payments with respect to LNP technology used in the additional product concepts. In the event we exercise our right to share in the development, manufacture and commercialization of a product, we must pay Genmab a one-time payment of \$3 million and refund any option fee paid by Genmab with respect to such product. As of May 31, 2020, we have received approximately \$0.1 million in development cost reimbursements and we have not received any reservation, product selection, option exercise or sublicense fees or milestone or royalty payments.

We are required to use commercially reasonable efforts to perform our obligations under the research and development plans established in connection with the Genmab Agreement. Genmab is required to use commercially reasonable efforts to identify and develop the Genmab First Program product and each additional product Genmab adds to the development program under the Genmab Agreement, and to further develop the Genmab First Program product and each optioned product to marketing authorization and to commercialize each product for which it obtains regulatory approval. We and Genmab are required to make available to the other party all preclinical development data for each program under development under the Genmab Agreement until filing of an IND for such program. Following IND filing for a product, we and Genmab will establish a collaboration committee where Genmab will share the status, progress and results of the development of the respective product.

The term of the Genmab Agreement will continue until the expiration of the royalty term, unless terminated earlier by either party. The Genmab Agreement may be terminated upon written notice by either party upon the other party's material breach or default of any of its obligations following a cure period. Genmab may terminate the Genmab Agreement for convenience after a certain notice period. Upon expiration of the Genmab Agreement, the license rights we granted to Genmab under the Genmab Agreement will become fully paid-up, perpetual and non-exclusive. In the event of termination for our material breach, we will grant Genmab an exclusive (even to us), worldwide and sublicensable license to exploit any product identified prior to termination, subject to Genmab's continued milestone and royalty obligations. In the event of termination by us for Genmab's material breach, or Genmab's termination for convenience, the licenses granted to Genmab will automatically terminate. Additionally, at our request, Genmab will grant us a non-exclusive, royalty-free, sublicensable, perpetual and worldwide license under certain Genmab intellectual property that is created under the Genmab Agreement and that is required to develop, manufacture and commercialize our own mRNA antibody products targeting the collaboration targets

under the Genmab Agreement prior to termination. Such license would not include any license to Genmab background intellectual property or the specific products or antibodies developed by Genmab.

Arcturus Development and Option Agreement

In January 2018, we entered into the Arcturus Agreement, pursuant to which Arcturus granted us the right to reserve a certain number of targets and an irrevocable offer to obtain a license to a certain number of such reserved targets to develop, manufacture and commercialize products containing Arcturus's LNP technology (LMD technology) and mRNA constructs intended to express such targets. The Arcturus Agreement was amended in May 2018, September 2018 and July 2019. As of May 31, 2020, we have not accepted the offer with respect to any targets.

Under the Arcturus Agreement, Arcturus is responsible for the LNP chemistry and formulation and characterization work and we are responsible for mRNA construct development.

Both parties will undertake certain allocated preclinical studies. Each party is required to use diligent efforts to perform its obligations under the work plans established in connection with the Arcturus Agreement and Arcturus is required to use diligent efforts to manufacture and supply us with certain formulated products. The Arcturus Agreement provides for the establishment of a joint development committee for the discussion of development efforts under the Arcturus Agreement.

We agreed to pay Arcturus an upfront fee of \$5 million in connection with the Arcturus Agreement and must pay an extension fee of \$1 million if we exercise our option to extend the initial term of the Arcturus Agreement beyond July 2023. We are further required to reimburse Arcturus for certain costs incurred in connection with development activities and provide certain FTE funding. We are additionally required to pay up to an aggregate of \$5 million in connection with our acceptance of the irrevocable offer to obtain licenses for further development and commercialization of selected targets. Under each license agreement to be entered into in connection with our selection of targets, we will additionally be required to make certain royalty payments, which are not in excess of 10%, subject to certain customary reductions, on a country-by-country and a product-by-product basis until the later of the expiration of the last-to-expire valid patent in such country covering such licensed product, expiration of regulatory exclusivity for such product in such country or ten years from the date of the first commercial sale of such product in such country. We additionally must pay Arcturus up to \$6 million in development milestone payments, \$9 million in regulatory milestone payments and \$8 million in commercial milestone payments in connection with each license agreement we enter into under the Arcturus Agreement. As of May 31, 2020, we have made payments totaling approximately \$5.3 million to Arcturus reimbursing Arcturus for development costs and in connection with our FTE funding obligations and we have not accepted the irrevocable offer with respect to any target and therefore have not paid any acceptance fees or made any milestone or royalty payments to Arcturus.

Under the Arcturus Agreement, Arcturus granted us a worldwide, non-exclusive license under its LNP technology for research and preclinical development. We granted Arcturus a worldwide, non-exclusive license under our mRNA technology solely to enable Arcturus to perform development activities in connection with the Arcturus Agreement.

The Arcturus Agreement will expire in July 2023 unless earlier terminated or extended for an additional 18 month term. We have the right to terminate the Arcturus Agreement in full or on a target-by-target basis in the event of a material breach by Arcturus following a cure period. We additionally have the right to terminate the Arcturus Agreement for convenience following a certain notice period and for change of control of Arcturus. In the event we terminate for Arcturus's breach, for convenience or for Arcturus's change of control, Arcturus will transfer all deliverables created under the Arcturus Agreement to us and all licenses granted under the Arcturus Agreement will terminate. In the event we terminate for Arcturus's breach, Arcturus will transfer any technology and provide licenses as reasonably necessary for us to complete work contemplated under any work plan relating to the terminated target and the acceptance fee relating to such target and payments due under any associated license agreement will be reduced by a certain percentage. Arcturus has the right to terminate the Arcturus Agreement in the event of a material breach by us following a cure period, in which event all licenses granted under the Arcturus Agreement

will terminate. Termination of the Arcturus Agreement shall not affect any then existing license agreements between us and Arcturus.

Acuitas Development and Option Agreement

In April 2016, we entered into the Acuitas Agreement pursuant to which Acuitas granted us the right to reserve a certain number of vaccine and other targets and an option to obtain a license to a certain number of such reserved targets to develop, manufacture and commercialize products containing Acuitas's LNP technology and mRNA constructs intended to express such targets. With respect to a certain number of non-exclusive licenses to vaccine targets that we obtain under the Acuitas Agreement, Acuitas additionally granted us an option to exchange each vaccine target licensed under such non-exclusive license for an alternate vaccine target for a certain period. As of May 31, 2020 we have exercised our option to obtain a non-exclusive license to nine targets, and have not exercised our option to exchange a vaccine target licensed under any non-exclusive license. We have also provided notice to Acuitas of our exercise of our option to obtain a non-exclusive license to four additional targets and we expect to enter into non-exclusive licenses with respect to such targets.

Under the Acuitas Agreement, Acuitas is responsible for the LNP chemistry and formulation and characterization work, and we are responsible for mRNA construct development. Both parties will undertake certain allocated preclinical studies. Each party is required to use diligent efforts to perform its obligations under the work plans established in connection with the Acuitas Agreement. Acuitas is further required to use diligent efforts to manufacture and supply us with certain formulated products. The Acuitas Agreement provides for the establishment of a joint development committee for the discussion of development efforts under the Acuitas Agreement. We are required to reimburse Acuitas for certain costs incurred in connection with development activities and certain FTE costs.

We are further required to pay Acuitas annual target reservation and maintenance fees of up to approximately \$1.1 million if we reserve the maximum number of targets permitted under the Acuitas Agreement. We are additionally required to pay an option exercise fee ranging from \$50,000 to \$300,000 upon each exercise of our option under the Acuitas Agreement, subject to certain additional fees ranging from \$10,000 to \$40,000 for the exercise of our option for certain other vaccine targets. We are required to pay Acuitas a \$5 million upfront fee in connection with an amendment to the Acuitas Agreement dated July 2020 and, upon each exercise of our option to exchange a vaccine target licensed under any non-exclusive license, we are required to pay an exchange fee of \$3 million. Under each license agreement we enter into in connection with our exercise of our option, we will additionally be required to make low single-digit percentage tiered royalty payments, subject to certain customary reductions, on a country-by-country and a product-by-product basis until the later of the expiration of the last-to-expire licensed patent in such country covering such licensed product, expiration of regulatory exclusivity for such product in such country or ten years from the date of the first commercial sale of such product in such country. Under each such license we additionally must pay up to between approximately \$1.1 million and \$2.9 million in development milestone payments, \$1.3 million and \$2.6 million in regulatory milestone payments and \$1.3 million and \$2.6 million in commercial milestone payments, depending on whether the license is exclusive or non-exclusive and the number of options exercised to date. As of May 31, 2020, we have paid Acuitas approximately \$2.3 million in reservation and option exercise fees and have made payments totaling approximately \$5.1 million reimbursing Acuitas for development costs and LNP batches and in connection with our FTE funding obligations. Payments made under the license agreements entered into in connection with our exercise of our option under the Acuitas Agreement are described below.

Under the Acuitas Agreement, Acuitas granted us a worldwide, non-exclusive license under its LNP technology for us to perform development activities and we granted Acuitas a worldwide, non-exclusive license under our mRNA technology solely to enable Acuitas to perform development activities in connection with the Acuitas Agreement.

The Acuitas Agreement will expire in April 2021 unless earlier terminated or extended. Both parties have the right to terminate the Acuitas Agreement in whole or on a program-by-program basis in the event of a material breach by the other party following a cure period. We additionally have the right to terminate the Acuitas Agreement for convenience following a certain notice period or for Acuitas's change of control. In the event of termination for any reason, Acuitas will transfer all deliverables created under the

Acuitas Agreement to us and in the event we terminate for reasons other than for Acuitas's material breach, we must make any payments owed to Acuitas up to the time of termination. In the event we terminate for Acuitas's material breach or for Acuitas's change of control, Acuitas will transfer any technology and provide licenses as reasonably necessary for us to complete work contemplated under the Acuitas Agreement and, in the case of termination for Acuitas's material breach, Acuitas must refund to us any target reservation and maintenance fees for the remainder of the contract year in which such termination is effective.

Acuitas Non-exclusive License Agreements

For each option we have exercised under the Acuitas Agreement, we have entered into a non-exclusive license agreement with Acuitas with respect to such optioned product, all based on the same form agreement, which we collectively refer to as the Acuitas License Agreements. Under the Acuitas License Agreements, Acuitas grants us a non-exclusive, non-transferable, sublicensable (subject to certain conditions) worldwide license under Acuitas's LNP technology to develop, manufacture and commercialize licensed products directed to the optioned targets. We may convert the non-exclusive licenses to exclusive licenses subject to certain additional financial obligations.

We must pay Acuitas up to between approximately \$1.1 million and \$1.6 million in development milestone payments, \$1.3 million and \$1.8 million in regulatory milestone payments and \$1.3 million and \$1.8 million in commercial milestone payments under each Acuitas License Agreement upon the occurrence of certain milestone events. We additionally are obligated to pay Acuitas annual fees ranging from \$5,000 to \$10,000 for any additional protein targeted by a vaccine product licensed under an Acuitas License Agreement after a certain milestone event. We are further required to pay Acuitas a low single-digit tiered percentage royalty on net sales of licensed products, subject to certain potential customary reductions. Our royalty obligations continue under each Acuitas License Agreement on a country-by-country and product-by-product basis until the later of the expiration of the last-to-expire licensed patent claim covering such licensed product in such country, expiration of any regulatory exclusivity period for such product in such country and ten years following the first commercial sale of such product in such country. As of May 31, 2020, we have made \$100,000 in development milestone payments to Acuitas with respect to the license agreement relating to Rabies RAV-G and have not made any royalty payments.

Each Acuitas License Agreement will continue on a product-by-product and a country-by-country basis until there are no more payments owed to Acuitas for such product in such country. Either party may terminate an Acuitas License Agreement in the event of a material breach by the other party following a cure period. We additionally have the right to terminate the Acuitas License Agreements for convenience following a certain notice period. Upon expiration of an Acuitas License Agreement, the licenses granted to us under such Acuitas License Agreement will become fully paid-up and will remain in effect. In the event of our termination of an Acuitas License Agreement for Acuitas's material breach, the rights and licenses granted to us under such agreement will become perpetual and irrevocable. Alternatively, instead of exercising our right to terminate in the event of Acuitas's material breach, we may elect to instead continue the license but reduce our milestone and royalty payment obligations to Acuitas by a certain percentage. In the event of termination of an Acuitas License Agreement by us for convenience or by Acuitas for our material breach, the licenses granted under such agreement will terminate, except that we will have the right to sell off any remaining inventories of licensed products for a certain period of time.

CRISPR Therapeutics Development and License Agreement

In November 2017, we entered into the CRISPR Therapeutics Agreement, pursuant to which we will develop novel Cas9 mRNA constructs for use in gene editing therapeutics. Under the terms of the CRISPR Therapeutics Agreement, we granted CRISPR Therapeutics a worldwide, exclusive (even to us), sublicensable (subject to certain conditions) license under certain intellectual property rights that are reasonably necessary or useful to develop, manufacture or commercialize products comprising Cas9 mRNA constructs, and under any patents controlled by us that arise from inventions discovered under the CRISPR Therapeutics Agreement to develop, manufacture and commercialize three of CRISPR Therapeutics' *in vivo* gene-editing programs for certain diseases. CRISPR Therapeutics granted us an exclusive (even as to CRISPR Therapeutics), worldwide, cost-free sublicense to manufacture products comprising Cas9 mRNA constructs for CRISPR Therapeutics.

CRISPR Therapeutics was required to pay us an upfront one-time technology access fee of \$3 million and we are eligible to receive up to \$13 million in development milestone payments, \$33 million in regulatory milestone payments and \$133 million in commercial milestone payments, as well as mid single-digit percentage royalties from CRISPR Therapeutics on the net sales of licensed products on a product-by-product and country-by-country basis, subject to certain potential customary reductions. CRISPR Therapeutics' royalty obligations continue on a product-by-product and country-by-country basis until the later of the date when there are no valid patent claims under our licensed patents covering such licensed product in such country, the date when regulatory exclusivity for such licensed product in such country expires and ten years following the date of first commercial sale of such licensed product in such country. CRISPR Therapeutics is additionally required to reimburse us for our FTE costs and reasonable out-of-pocket expenses incurred performing development activities under the CRISPR Therapeutics Agreement. In the event CRISPR Therapeutics exercises its right to sublicense under the agreement, CRISPR Therapeutics must pay us a low teens to mid-twenties percentage of any non-royalty sublicense income, depending on the timing of the sublicense and whether the sublicense is granted through an affiliate of CRISPR Therapeutics. As of May 31, 2020, we have received approximately €0.5 million in payments for the supply of materials and FTE cost and development reimbursements and no milestone, royalty or sublicense fee payments.

We are required to use commercially reasonable efforts to perform our development obligations under the CRISPR Therapeutics Agreement and to supply certain materials to CRISPR Therapeutics. CRISPR Therapeutics is required to use commercially reasonable efforts to perform its obligations under the development plan and to develop and commercialize licensed products. We and CRISPR are required to keep the other party informed regarding the progress and results of performance of all development activities under the CRISPR Therapeutics Agreement.

The term of the CRISPR Therapeutics Agreement will continue on a product-by-product and country-by-country basis, until the last-to-expire royalty term expires in such country for such product, unless terminated earlier by either party. The CRISPR Therapeutics Agreement may be terminated (i) by CRISPR Therapeutics for convenience following a certain notice period (ii) by us if CRISPR Therapeutics or any of its affiliates, either directly or indirectly, challenges or assists a third party to challenge the licensed patent rights or in the event CRISPR Therapeutics undergoes a change of control or (iii) by either party in the event of the other party's material breach following a cure period (including on a program-by-program basis) or in the event of the other party's insolvency. Upon expiration, the license granted to CRISPR Therapeutics converts into a fully paid-up, royalty-free, perpetual and irrevocable license. Upon termination, the licenses granted to CRISPR Therapeutics will terminate and, in the case of termination for CRISPR Therapeutics' material breach or insolvency or for convenience by CRISPR Therapeutics, CRISPR Therapeutics must transfer all Cas9 mRNA constructs and related data to us.

Boehringer Ingelheim Exclusive Collaboration and License Agreement

In August 2014, we entered into the Boehringer Agreement with Boehringer Ingelheim whereby we granted Boehringer Ingelheim an exclusive, worldwide, sublicensable (subject to certain conditions) license under certain of our intellectual property for the development and commercialization of our investigational therapeutic mRNA vaccine BI 1361849 (former CV9202) and products containing such vaccine for all uses for cancer in humans. We additionally granted Boehringer Ingelheim an option to obtain an additional exclusive license for no additional fee to develop and commercialize an additional vaccine derived from BI 1361849 (former CV9202) for all uses for cancer in humans, which option right expires in August 2024. As of May 31, 2020, Boehringer Ingelheim has not exercised its option right. The Boehringer Agreement was amended in June 2015, August 2016 and August 2019.

Under the collaboration, Boehringer Ingelheim agreed to start clinical investigation of BI 1361849 (former CV9202) in at least two different lung cancer settings: in combination with afatinib in patients with advanced or metastatic epidermal growth factor mutated non-small cell lung cancer, or NSCLC, and in combination with chemo-radiation therapy in patients with unresectable stage III NSCLC. This clinical development plan was later revised due to the establishment of checkpoint blocking antibody treatments as a new standard-of-care option for the treatment of advanced NSCLC and due to demonstrated synergy between mRNA vaccines and checkpoint blocking antibodies in preclinical models. BI 1361849 (former CV9202) is currently in Phase 1/2 of clinical investigation in combination with two checkpoint blocking

antibodies, Durvalumab, a PD-L1 antibody, and Tremelimumab, a CTLA4 antibody, both by Medimmune, in a trial sponsored by the Ludwig Institute for Cancer Research.

Boehringer Ingelheim is obligated to use commercially reasonable efforts to progress the development and commercialization of BI 1361849 (former CV9202). We are required to use commercially reasonable efforts to progress certain research and development activities in respect of the manufacturing of BI 1361849 (former CV9202). We are required to provide all BI 1361849 (former CV9202) required for nonclinical and clinical development and for commercialization. In the event we fail to meet certain manufacturing benchmarks, Boehringer Ingelheim will have the right to assume the manufacture of BI 1361849 (former CV9202). The Boehringer Agreement provides for the creation of a joint steering committee which is responsible for the review of development plans, the monitoring of development activities and the exchange of development data and other technical information. With certain limited exceptions, Boehringer Ingelheim is responsible for all regulatory matters provided that we have the right and obligation to review and comment on all regulatory filings to the extent such filings relate to BI 1361849 (former CV9202). In the event Boehringer Ingelheim or its affiliates or sublicensees commence clinical trials or commercialization of any mRNA-based protamine-complex vaccine targeting any of the indications for which Boehringer Ingelheim is developing BI 1361849 (former CV9202), we have the right to convert the exclusive license granted to Boehringer Ingelheim under the Boehringer Agreement to a non-exclusive license and Boehringer Ingelheim will be required to grant us a non-exclusive license to any intellectual property developed under the Boehringer Agreement, subject to certain exceptions, for the development, manufacture and commercialization of BI 1361849 (former CV9202).

Under the terms of the Boehringer Agreement, Boehringer Ingelheim was required to pay us an upfront payment of €30 million and an additional upfront option fee of €5 million. As of May 31, 2020, we have received €7 million in development milestone payments and can further achieve up to an additional €73 million in development milestone payments, €250 million in regulatory milestone payments and €100 million in commercial milestone payments. In addition, Boehringer Ingelheim agreed to pay us royalties in the low teens on net sales, subject to certain potential customary reductions. Boehringer Ingelheim's royalty obligations continue on a product-by-product and country-by-country basis in certain major markets until the latest of the date when there are no valid patent claims under our licensed patents covering such licensed product in such country, the date when regulatory exclusivity for such licensed product in the applicable country expires and twelve years following the date of the first commercial sale of such licensed product in such country if such country is designated as a major market or fifteen years following the date of the first commercial sale of such licensed product in any non-major market country if such country is not designated as a major-market country. We are responsible for any payment obligations arising under certain existing third-party license agreements and costs we incur in relation to the research and development of BI 1361849 (former CV9202) manufacturing technology. Boehringer Ingelheim is responsible for all other development and commercialization costs and is required to reimburse us for any such costs we may incur. As of May 31, 2020, Boehringer Ingelheim has made payments to us for a net amount of approximately €7.4 million for the supply of materials and reimbursing us for development costs. We have received no royalty payments.

Boehringer Ingelheim solely owns any intellectual property arising out of the collaboration that is both only dependent upon or covered by Boehringer Ingelheim's preexisting intellectual property and does not relate to the development or manufacture of BI 1361849 (former CV9202) or other RNA-based products owned or in-licensed by us, as well as any intellectual property that is solely directed to the composition of matter, the formulation or use of BI 1361849 (former CV9202) and not applicable to any other vaccine. We own any intellectual property arising out of the collaboration that is dependent upon or covered by our preexisting intellectual property and not Boehringer Ingelheim's preexisting intellectual property, and is not solely directed to the composition of matter, the formulation or use of BI 1361849 (former CV9202), as well as any intellectual property that is directed to the development or manufacture of BI 1361849 (former CV9202) or other RNA-based products owned or in-licensed by us. All other intellectual property developed under the Boehringer Agreement is jointly owned by us and Boehringer Ingelheim. Boehringer Ingelheim grants us a fully paid-up, irrevocable, perpetual, sublicensable and transferable license under any intellectual property developed under the Boehringer Agreement and owned by Boehringer Ingelheim for the manufacture of BI 1361849 (former CV9202), the exploitation of any product other than BI 1361849 (former CV9202) and for any use other than uses for cancer in humans. We grant Boehringer Ingelheim a cost-free, fully paid-up, non-exclusive, irrevocable, perpetual, sublicensable and transferable license under

intellectual property developed under the Boehringer Agreement and assigned to us by Boehringer Ingelheim for exploitation outside of the scope of the Boehringer Agreement. Upon the occurrence of a certain milestone event, we must assign to Boehringer Ingelheim certain patent rights that relate specifically to BI 1361849 (former CV9202) and Boehringer Ingelheim will grant us an exclusive, irrevocable, perpetual, cost-free, sublicensable and transferable license to use such patent rights for the manufacture of BI 1361849 (former CV9202), the exploitation of any product other than BI 1361849 (former CV9202) and for any use other than uses for cancer in humans.

The term of the Boehringer Agreement will continue on a country-by-country and product-by-product basis until the expiration of the last to expire royalty term, unless terminated earlier by either party. Boehringer Ingelheim may terminate the Boehringer Agreement for convenience following a certain notice period. Either party may terminate the Boehringer Agreement upon the other's material breach, following a cure period. In addition, we may terminate the Boehringer Agreement if Boehringer Ingelheim or any of its affiliates, directly or indirectly, challenges or assists a third party to challenge the validity of licensed patent rights. Upon expiration of the Boehringer Agreement, Boehringer Ingelheim will retain the license granted to it under the Boehringer Agreement on an exclusive, irrevocable, perpetual, fully paid and royalty-free basis, with such license converting to a non-exclusive license after the later of a certain period following expiration of the Boehringer Agreement or such time as we no longer supply to Boehringer Ingelheim a certain percentage of its demand for BI 1361849 (former CV9202). Following expiration we are required to reasonably consider continuing to supply Boehringer Ingelheim with BI 1361849 (former CV9202) but in the event we cannot agree on the terms of such supply, we will be required to grant Boehringer Ingelheim a license to manufacture BI 1361849 (former CV9202) and provide technology transfer assistance in exchange for a €5 million fee. Upon termination of the Boehringer Agreement, the rights and licenses granted by us to Boehringer Ingelheim will revert back to us, provided that Boehringer Ingelheim has the right to sell off existing inventory of BI 1361849 (former CV9202) for a certain period. In the event of our material breach, Boehringer Ingelheim may elect to terminate the Boehringer Agreement, in which case we must reimburse Boehringer Ingelheim for all wind down expenses of ongoing clinical trials, or continue to exercise its rights and obligations under the Boehringer Agreement, receive damages from us determined in a dispute resolution proceeding and continue paying us milestone and royalty payments. In the event of termination by Boehringer Ingelheim for convenience or by us for Boehringer Ingelheim's patent challenge or material breach, Boehringer Ingelheim must assign to us all regulatory approvals or applications and grant us a non-exclusive, cost-free, perpetual and worldwide license to intellectual property held by Boehringer Ingeheim that has been used in the development, manufacture or commercialization of BI 1361849 (former CV9202) or any other product developed under the Boehringer Agreement.

Bill & Melinda Gates Foundation Partnership

In May 2014, we entered into a grant agreement with the Bill & Melinda Gates Foundation for the development of a vaccine for rotaviruses. Under the terms of the grant, the Bill & Melinda Gates Foundation will provide up to approximately \$2.5 million in funding and we are required to perform certain activities specified in a project collaboration plan. As of May 31, 2020, we have received approximately \$2.0 million in funding under the agreement. We own all intellectual property created using grant funding; however, we must make any Bill & Melinda Gates Foundation-funded products available at an affordable price in a list of clearly defined low and lower middle-income countries. The term of the rotavirus agreement continues until October 2021. Both parties have the right to terminate the agreement for convenience following a notice period or in the event of the other party's material breach following a cure period. Our global access commitments survive termination or expiration of the agreement.

In March 2015, the Bill & Melinda Gates Foundation made an equity investment of \$40 million to support continued development of our RNA technology platform and the construction of an industrial scale cGMP production facility, and we entered into the Global Access Commitments Agreement with the Bill & Melinda Gates Foundation in February 2015 pursuant to which we are required to take certain actions to support the Bill & Melinda Gates Foundation's mission. In particular, we are required to conduct development activities for up to three concurrent projects to be proposed by the Bill & Melinda Gates Foundation, subject to our right to reject proposed projects where we believe there is a reasonable likelihood of a material adverse effect on us. The costs of such projects will be allocated on a project-by-project basis

in proportion to the allocation of the expected benefits. All intellectual property developed in connection with such projects will be owned by us.

Under the terms of the Global Access Commitments Agreement, any Bill & Melinda Gates Foundation funded products will be made available by us at an affordable price in a list of clearly defined low and lower middle-income countries, while we will be able to market such products in developed countries on our own or through licensees. In addition, the new manufacturing facility will have dedicated capacity to focus on products resulting from Bill & Melinda Gates Foundation-related projects for distribution in such low and lower middle-income countries.

Our global access commitments are perpetual, however, our obligation to commence new development programs expires in February 2025. In the event that we commit a material breach of the Global Access Agreement, following a cure period, we must grant the Bill & Melinda Gates Foundation a non-exclusive, perpetual, irrevocable, fully paid-up, royalty-free license under any intellectual property controlled by us covering any Bill & Melinda Gates Foundation-funded products to develop, manufacture and commercialize such products in low and lower middle-income countries, and the Bill & Melinda Gates Foundation will have certain withdrawal rights with respect to its equity investment in us. For more information on the Bill & Melinda Gates Foundation's withdrawal rights, see "Related Party Transactions — Investment and Shareholders' Agreement."

In November 2016 in connection with and subject to the terms of the Global Access Agreement, we were awarded a grant for up to approximately \$0.9 million in funding from the Bill & Melinda Gates Foundation for the development of a vaccine for picornaviruses. As of May 31, 2020, we have received approximately \$0.7 million in funding under the grant agreement. We granted the Bill & Melinda Gates Foundation a non-exclusive, perpetual, irrevocable, worldwide, royalty-free, fully paid-up, sub-licensable license to make, use, sell, offer to sell, import, distribute, copy, modify, create derivative works, publicly perform and display any products developed using grant funding; however, in the event we demonstrate to the satisfaction of the Bill & Melinda Gates Foundation that we are able to meet its global access requirements, such license will be modified or terminated. The term of the picornavirus grant continues until January 2021; however, our global access commitments survive.

In November 2017, also in connection with and subject to the terms of the Global Access Agreement, we were awarded two additional grants for up to approximately \$1.9 million and \$1.5 million from the Bill & Melinda Gates Foundation for the development of a universal influenza vaccine and a malaria vaccine, respectively. As of May 31, 2020, we have received approximately \$1.5 million and \$0.8 million, respectively, in funding under each grant agreement. The programs will leverage our advanced RActive® prophylactic vaccine technology to develop mRNA-based universal influenza and malaria vaccines. The malaria grant agreement continues until December 2021 and the universal influenza grant agreement continues until June 2021, unless terminated earlier by the Bill & Melinda Gates Foundation.

The Bill & Melinda Gates Foundation can terminate any of the three grant agreements entered into in connection with the Global Access Agreement early if it is not reasonably satisfied with our progress on a specific project, there are significant changes to our leadership, another issue arises which threatens a specific project's success, there is a change in our control or tax status, or we fail to comply with the grant agreement. Our global access commitments survive termination or expiration. Any grant funds that have not been used for, or committed to, the underlying project upon expiration or termination of a grant agreement must be returned to the Bill & Melinda Gates Foundation.

Coalition for Epidemic Preparedness Innovations Framework Partnering Agreement

In February 2019, we entered into the CEPI Agreement to develop our RNA Printer using certain intellectual property controlled by us covering the development and manufacture of mRNA products as well as certain additional intellectual property licensed to us. In connection with the CEPI Agreement we have entered into work orders for the preclinical development of a Lassa virus vaccine, a yellow fever vaccine and our rabies virus vaccine. In addition, we entered into a work package for the preclinical development and a Phase 1 clinical trial for a SARS-CoV-2 vaccine.

We are required to use reasonable efforts to achieve certain development milestones and are responsible for conducting certain clinical trials. We are required to share clinical trial data with CEPI,

subject to the terms of specific work packages entered into in connection with the CEPI Agreement. In the event of an infectious disease outbreak, where such outbreak can be addressed by a Lassa virus, SARS-CoV-2 or future vaccine developed under the CEPI Agreement, we must manufacture such vaccine for use in the area affected by the outbreak on economic terms that satisfy CEPI's equitable access guidelines or otherwise allow CEPI or a third party to supply such vaccine in the affected area. For the initial term of the CEPI Agreement and for a certain period thereafter, in the event of an outbreak that cannot be addressed by a vaccine already developed under the CEPI Agreement, CEPI may request, and we may agree, that we will develop a product targeted against such outbreak or we will assist CEPI to develop a candidate product against such outbreak. In the event we decline to enter into such a development agreement, we will grant CEPI the right to develop and stockpile such vaccines under certain of our background intellectual property and intellectual property developed under the CEPI Agreement. We are additionally required to use reasonable efforts, at CEPI's request, to submit certain optimized antigen nucleotide sequences for up to three specified pathogens in order for CEPI to start its own product development program. We have a right of first refusal to manufacture any pharmaceutical products developed by CEPI using the antigen nucleotide sequences we provide. In certain scenarios, including if we fail to provide Lassa virus, SARS-CoV-2 or future vaccines developed under the CEPI Agreement at prices that comply with CEPI's equitable access guidelines, we must grant CEPI a license under certain of our background intellectual property and intellectual property developed under the CEPI Agreement to, among other things, develop our automation solution for use in treating such infectious diseases and to develop, manufacture and market such pharmaceutical products for use in geographic areas where there is a disease outbreak.

We are required to grant certain approved manufacturers all necessary rights to use certain of our preexisting intellectual property and intellectual property developed under the CEPI Agreement to further develop our automation solution and manufacture products for the treatment of certain diseases in geographic areas where there is an outbreak on economic terms that satisfy CEPI's equitable access guidelines. We must provide all necessary commercially reasonable support to such approved manufacturers to facilitate such efforts.

CEPI agreed to contribute up to approximately \$34 million in funding for projects undertaken under the CEPI Agreement and an additional \$15.3 million in connection with development of the SARS-CoV-2 vaccine. In the event of our commercial use of the pharmaceutical products developed under the CEPI Agreement, we must notify CEPI and agree in good faith how such commercial benefits are to be equitably managed between the parties. As of May 31, 2020, we have received approximately €20.5 million in funding for projects undertaken under the CEPI Agreement.

We solely own all intellectual property developed under the CEPI Agreement but are required to obtain CEPI's consent prior to exploiting any intellectual property developed under the CEPI Agreement if such exploitation is in conflict with or goes against CEPI's mission or policies.

The CEPI Agreement will continue until February 2022 unless earlier terminated. Either party may terminate the CEPI Agreement if the other party commits a material breach or in the event of the other party's insolvency following a cure period. CEPI has the right to terminate the CEPI Agreement immediately upon written notice in the event we take any action incompatible with CEPI's mission, we and CEPI are unable to reach agreement on a development or marketing plan or on a project lead, we undergo a change of control, we are unable to achieve certain milestones or certain material safety or quality issues arise. In the event that CEPI terminates the CEPI Agreement, we will grant CEPI a license under our background intellectual property and intellectual property developed under the CEPI Agreement to, among other things, develop and use our RNA Printer for use in treating certain infectious diseases and to manufacture products developed under the CEPI Agreement. In the event we terminate the CEPI Agreement for CEPI's material breach, CEPI must make all outstanding payments due to us under any work package relating to expenditures that we have already committed. Regardless of the cause of termination, our obligations in the event of an infectious disease outbreak will terminate and we must transfer any vaccines developed under the CEPI Agreement as well as all regulatory applications and regulatory approvals relating to such vaccines to CEPI and we retain the right to continue using intellectual property developed under the CEPI Agreement for any purpose. In certain situations, we may be required to return funding provided by CEPI. See note 3 to our financial statements contained elsewhere in this prospectus for further information on the terms of the funding provided by CEPI.

Tesla Grohmann Development and Intellectual Property Agreement

In November 2015, we entered into the Tesla Grohmann Agreement with Tesla Grohmann pursuant to which Tesla Grohmann agreed to design, develop and manufacture certain automated manufacturing machines on our behalf. We are obligated to pay Tesla Grohmann a fee for each machine delivered by Tesla Grohmann and up to \$50 million to \$60 million in commercial milestone payments as well as certain development costs under each associated work order. As of May 31, 2020 we have paid Tesla Grohmann approximately €5 million to €6 million in development costs under various work orders and we have not paid any fees for machines provided under the Tesla Grohmann Agreement or made any milestone payments.

The parties jointly own any intellectual property developed under the Tesla Grohmann Agreement and Tesla Grohmann granted us a non-exclusive, royalty-free, perpetual, irrevocable as to existing machines, worldwide license to use, sublicense and distribute Tesla Grohmann background intellectual property that is incorporated into any machine developed under the Tesla Grohmann Agreement and an exclusive (only with respect to the machines, and until a certain period after the first commercial use of a machine, after which the license shall be non-exclusive), royalty-free, perpetual, irrevocable as to existing machines, worldwide license under Tesla Grohmann's interest in any jointly owned intellectual property. We granted Tesla Grohmann a non-exclusive, non-transferable, no-charge license during the term of the Tesla Grohmann Agreement under our background intellectual property for Tesla Grohmann's performance of its obligations under the Tesla Grohmann Agreement and a non-exclusive, royalty-free, perpetual, irrevocable as to existing machines, worldwide license under our interest in any jointly owned intellectual property to perform its obligations under the Tesla Grohmann Agreement and for applications and uses unrelated to the machines developed under the Tesla Grohmann Agreement.

The Tesla Grohmann Agreement continues on a machine-by-machine basis until ten years after the first commercial use of such machine. Either party may terminate any work order entered into in connection with the Tesla Grohmann Agreement for convenience upon written notice to the other party and either party may terminate a work order for the other party's material breach following a cure period, or for the other party's insolvency. In the event Tesla Grohmann terminates a work order for convenience or we terminate for Tesla Grohmann's material breach or insolvency, Tesla Grohmann must grant us a non-exclusive, fully paid-up, worldwide, irrevocable, perpetual, transferable and sublicensable license under Tesla Grohmann background intellectual property and Tesla Grohmann's interest in intellectual property developed under the Tesla Grohmann Agreement for us to complete, either on our own or with another supplier, the work under such terminated work order. In the event we terminate for convenience, we must pay Tesla Grohmann a termination fee. In the event Tesla Grohmann terminates for our material breach or insolvency, we must pay Tesla Grohmann a termination fee and grant Tesla Grohmann a non-exclusive, fully paid-up, sublicensable, worldwide irrevocable and perpetual license under our background intellectual property and our interest in the intellectual property developed under the Tesla Grohmann Agreement to manufacture machines relevant to the applicable work order.

Eli Lilly License and Collaboration Agreement

In November 2017, we entered into the Eli Lilly Agreement with Eli Lilly focused on the development and commercialization of cancer vaccine products that can work as pre-manufactured vaccines for a well-defined patient subpopulation, to be selected by Eli Lilly, based on our proprietary RNAActive® technology. In June 2020 we entered into a termination agreement with Eli Lilly, which we refer to as the Eli Lilly Termination Agreement.

Under the terms of the Eli Lilly Agreement, we granted Eli Lilly a worldwide, exclusive (even as to us), sublicensable (subject to certain conditions) license to develop, manufacture and commercialize licensed products comprised of mRNA constructs that express certain selected neoantigens for human use. We also granted Eli Lilly a worldwide, non-exclusive, sublicensable (subject to certain conditions) license to perform development activities under the Eli Lilly Agreement, including work required to select targets and related neoantigens. Eli Lilly granted us a worldwide, exclusive, non-sublicensable (except to our affiliates), royalty-free license under our licensed intellectual property solely to manufacture and supply Eli Lilly with vaccines for early clinical use. Eli Lilly also granted us a worldwide, non-exclusive, non-royaltybearing, non-sublicensable (except to our affiliates), fully paid-up license to perform development activities under the Eli Lilly

Agreement. In 2017, we received an upfront payment of \$50 million and an equity investment of €45 million and as of May 31, 2020, we have received approximately €14.6 million in payments for the supply of materials and reimbursements for development costs. Pursuant to the Eli Lilly Termination Agreement, all licenses granted under the Eli Lilly Agreement terminated and Eli Lilly has no further payment obligations to us under the Eli Lilly Agreement.

Under the terms of the Eli Lilly Termination Agreement, Eli Lilly is required to provide us access to certain analyses and data developed under the Eli Lilly Agreement and to transfer to us certain materials produced under the Eli Lilly Agreement. Eli Lilly additionally re-assigned to us a certain composition of matter patent, which had been assigned from us to Eli Lilly under the Eli Lilly Agreement. We additionally have the option, for a certain period following the effective date of termination, to obtain a non-exclusive, royalty-bearing license under certain Eli Lilly intellectual-property used in connection with the initial shared neoantigen product developed under the Eli Lilly Agreement to develop and commercialize such product and pay Eli Lilly a single-digit percentage royalty on net sales. Pursuant to the terms of the Eli Lilly Termination Agreement, we also granted Eli Lilly a right of first negotiation with respect to the initial shared neoantigen product developed under the Eli Lilly Agreement for a certain period following a certain milestone event.

Sponsored Collaboration Agreements

Yale Collaborative Research Agreement

In July 2019, we entered into a Collaborative Research Agreement, which we refer to as the Yale Agreement, for research in mRNA-based pulmonary therapeutic candidates with Yale University, or Yale. Under the Yale Agreement, Yale will perform discovery research on targets related to pulmonary diseases and present therapeutic candidates to us for preclinical and subsequent clinical development. We are required to reimburse Yale for approximately \$0.8 million in costs incurred in connection with research activities conducted under the Yale Agreement and for certain patent prosecution and maintenance costs. As of May 31, 2020, we have provided approximately \$0.4 million in funding to Yale under the Yale Agreement.

Each party will solely own inventions it solely develops and will jointly own jointly developed inventions. Yale is required to grant us an exclusive license under Yale's interest in any intellectual property developed under the Yale Agreement, subject to Yale's retained right to use such intellectual property for academic purposes. Under any such license agreement, we will be required to pay Yale up to approximately \$1.2 million in development milestone payments and \$1.5 million in commercial milestone payments, an annual maintenance fee of between \$10,000 and \$60,000 until the first commercial sale of a licensed product and a low single-digit percentage royalty on net sales on a product-by-product and country-by-country basis until the later of the expiration of the last to expire claim covering such product in such country or ten years after the first commercial sale of such product in such country. Yale additionally granted us an exclusive option to negotiate an exclusive or non-exclusive license to certain background intellectual property.

The Yale Agreement will continue until June 2021, unless extended by mutual agreement or earlier terminated. We have the right to terminate the Yale Agreement for convenience following a certain notice period. Both parties have the right to terminate the Yale Agreement for the other party's material breach following a cure period. If we terminate the Yale Agreement without reimbursing Yale for its research costs, Yale will have no obligation to grant us a license to intellectual property developed under the Yale Agreement.

Schepens Institute Research Agreement

In March 2019, we entered into a Sponsored Research Agreement, which we refer to as the Schepens Agreement, with SERI, pursuant to which SERI agreed to perform certain research activities for mRNA-based eye therapy candidates. Under the Schepens Agreement, SERI granted us an exclusive option to initiate negotiations for an exclusive or non-exclusive license to SERI's interest in any inventions developed under the Schepens Agreement. SERI additionally granted us an exclusive option to negotiate an exclusive license to certain background intellectual property. Under any such background intellectual property license, we will be required to pay SERI a \$30,000 upfront payment, up to approximately \$0.8 million in development milestone payments and \$1.8 million in regulatory milestone payments, and a low

single-digit percentage royalty on net sales subject to certain minimum annual payments. We are required to provide \$1 million in funding to SERI in multiple payments during the term of the Schepens Agreement. As of May 31, 2020, we have provided approximately \$0.8 million in funding to SERI under the Schepens Agreement.

Each party will solely own inventions it solely develops and will jointly own jointly developed inventions. We are responsible for all patent prosecution costs and if we elect not to cover the prosecution costs for SERI's interest in intellectual property developed under the Schepens Agreement, SERI will have the right to license such inventions to third parties and we will have no rights in such inventions.

The Schepens Agreement continues until July 2021, unless extended by mutual agreement or earlier terminated. Both parties have the right to terminate the Schepens Agreement for the other party's material breach following a cure period and SERI has the right to terminate in the event of our insolvency. We additionally have the right to terminate the Schepens Agreement for convenience following a notice period. In the event SERI terminates for our material breach or insolvency or we terminate for convenience, we must reimburse SERI for all costs incurred to date and provide certain additional funding for a three-month period. In the event we terminate for SERI's material breach, we must reimburse SERI for all noncancellable commitments.

Intellectual Property

Our commercial success depends in part on our ability to obtain and maintain proprietary or intellectual property protection for our product candidates and our core technologies and other know-how, defend and enforce our patents, preserve the confidentiality of our trade secrets, operate our business without infringing, misappropriating or otherwise violating the intellectual property or proprietary rights of third parties and prevent third parties from infringing, misappropriating or otherwise violating our proprietary or intellectual property rights. We seek to protect our proprietary and intellectual property position by, among other methods, seeking and maintaining patents in the U.S. and other major markets. We also rely on trade secrets and know-how to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection, which we generally seek to protect through contractual obligations with third parties.

Patents

As of May 31, 2020, we own approximately 49 issued U.S. patents, 119 pending U.S. patent applications, 644 issued foreign patents (including 50 European patents, which have been validated in various European countries resulting in a total of approximately 506 national patents in European countries), 393 pending foreign patent applications (including 79 pending European patent applications) and 16 pending Patent Cooperation Treaty, or PCT, patent applications, including three pending U.S. patent applications, 22 foreign patent applications and two PCT patent applications that are jointly owned with third parties. These patents include claims relating to our RNAoptimizer technology platform, CV8102, BI 1361849 (former CV9202), CV7202, CV-SSIV, our SARS-CoV-2 vaccine and our CVCM delivery system, as described further below.

RNAoptimizer

As of May 31, 2020 we own 17 issued U.S. patents, 15 pending U.S. patent applications, 68 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia, and 126 pending foreign patent applications and one PCT patent application relating to our RNAoptimizer technology, including patents and patent applications relating to ORF optimization, UTR optimization, protein optimization and formulation. Our RNAoptimizer technology is used in our BI 1361849 (former CV9202), CV7202, CV-SSIV and SARS-CoV-2 product candidates. The issued patents are expected to expire between 2022 and 2034, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending patent applications would be expected to expire between 2022 and 2039, excluding any additional term for patent term adjustments or patent term extensions.

CV8102

As of May 31, 2020 we own four issued U.S. patents, three pending U.S. patent applications, 31 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia, and 28 pending foreign patent applications relating to our CV8102 product candidate. The issued patents are expected to expire between 2028 and 2036, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending applications would be expected to expire between 2029 and 2037, excluding any additional term for patent term adjustments or patent term extensions.

BI 1361849 (former CV9202)

As of May 31, 2020 we own 11 issued U.S. patents, nine pending U.S. patent applications, 56 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia, and 71 pending foreign patent applications relating to our BI 1361849 (former CV9202) product candidate. The issued patents are expected to expire between 2022 and 2034, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending patent applications would be expected to expire between 2022 and 2034, excluding any additional term for patent term adjustments or patent term extensions.

CV7202

As of May 31, 2020 we own five issued U.S. patents, five pending U.S. patent applications, 17 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia, and 30 pending foreign patent applications relating to our CV7202 product candidate. The issued patents are expected to expire between 2022 and 2031, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending patent applications would be expected to expire between 2022 and 2037, excluding any additional term for patent term adjustments or patent term extensions.

CV-SSIV

As of May 31, 2020 we own six issued U.S. patents, ten pending U.S. patent applications, 22 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia and 36 pending foreign patent applications relating to our CV-SSIV product candidate. The issued patents are expected to expire between 2022 and 2033, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending patent applications would be expected to expire between 2022 and 2038, excluding any additional term for patent term adjustments or patent term extensions.

SARS-CoV-2 vaccine

As of May 31, 2020 we own five issued U.S. patents, three pending U.S. patent applications, 17 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia, and 23 pending foreign patent applications and three PCT patent applications relating to our SARS-CoV-2 product candidate. The issued patents are expected to expire between 2022 and 2031, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending patent applications would be expected to expire between 2022 and 2040, excluding any additional term for patent term adjustments or patent term extensions.

CVCM delivery system

As of May 31, 2020 we own three issued U.S. patents, two pending U.S. patent applications, 11 issued foreign patents, including in Europe, Canada, China, Japan, the Republic of Korea, Singapore, Russia, Mexico and Australia, and 12 pending foreign patent applications relating to our proprietary CVCM delivery system. The issued patents are expected to expire in 2029, excluding any additional term for patent term adjustments or patent term extensions. If granted, the pending applications would be expected to expire between 2029 and 2037, excluding any additional term for patent term adjustments or patent term extensions.

The term of individual patents depends upon the legal term for patents in the countries in which they are obtained. In most countries in which we have filed patent applications, including the U.S., the patent term is 20 years from the earliest filing date of a non-provisional patent application. In the U.S., a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent. The term of a patent that covers a drug or biological product may also be eligible for patent term extension when FDA approval is granted for a portion of the term effectively lost as a result of the FDA regulatory review period, subject to certain limitations and provided statutory and regulatory requirements are met. For more information on patent term extension, see "Business — Government Regulation — Patent Term Restoration and Extension."

As with other biotechnology and pharmaceutical companies, our ability to maintain and solidify our proprietary and intellectual property position for our product candidates will depend on our success in obtaining effective patent claims and enforcing those claims if granted. However, our owned and licensed pending patent applications, and any patent applications that we may in the future file or license from third parties may not result in the issuance of patents. We also cannot predict the breadth of claims that may be allowed or enforced in our patents. Any issued patents that we may receive in the future may be challenged, invalidated, narrowed, held unenforceable, infringed or circumvented. In addition, because of the extensive time required for clinical development and regulatory review of a product candidate we may develop, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby limiting the protection such patent would afford the respective product and any competitive advantage such patent may provide. See "Risk Factors — Risks Related to Our Intellectual Property Rights."

Trademarks

As of May 31, 2020, we own trademark registrations or registration applications for CureVac, and the CureVac logo in the U.S. and in certain foreign jurisdictions including Europe.

Trade Secrets and Proprietary Information

In addition to patents, we rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. However, trade secrets and know-how can be difficult to protect. We seek to protect our proprietary information, in part, by executing confidentiality agreements with our collaborators and scientific advisors, and non-competition, non-solicitation, confidentiality, and invention assignment agreements with our employees, consultants, and independent contractors. We have also executed agreements requiring assignment of inventions with selected scientific advisors and collaborators. The confidentiality agreements we enter into are designed to protect our proprietary information and the agreements or clauses requiring assignment of inventions to us are designed to grant us ownership of technologies that are developed through our relationship with the respective counterparty. We cannot guarantee, however, that we have executed such agreements with all applicable counterparties, such agreements will not be breached, or that these agreements will afford us adequate protection of our intellectual property and proprietary rights. See "Risk Factors — Risks Related to Our Intellectual Property Rights."

Government Regulation

Government authorities in the United States, at the federal, state and local level, in other countries and jurisdictions and in the European Union, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products, including biological products. In addition, some jurisdictions regulate the pricing of pharmaceutical products. The processes for obtaining marketing approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other requirements of regulatory authorities, require the expenditure of substantial time and financial resources.

Patent Term Restoration and Extension

Depending upon the timing, duration and specifics of FDA approval of product candidates, some of a sponsor's U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period generally is one-half the time between the effective date of an IND and the submission date of a BLA less any time the sponsor did not act with due diligence during the period, plus the time between the submission date of a BLA and the approval of that application less any time the sponsor did not act with due diligence during the period. Only one patent applicable to an approved biologic product is eligible for the extension, only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended, and the application for the extension must be submitted prior to the expiration of the patent. Moreover, a given patent may only be extended once based on a single product. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our products receive FDA approval, we expect to apply for patent term extensions on patents covering those products, however there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions. For more information regarding the risks related to our intellectual property, see "Risk Factors — Risks Related to Our Intellectual Property Rights."

Regulation and Procedures Governing Approval of Biological Products in the United States

In the United States, we expect our product candidates will be regulated as biological products, or biologics, under the Public Health Service Act, or PHSA, and the Federal Food, Drug, and Cosmetic Act, or FDCA, and their implementing regulations, and other federal, state, local and foreign statutes and regulations. The failure to comply with the applicable U.S. requirements at any time during the product development process, including during nonclinical testing, clinical testing, the approval process or post-approval process, may subject an applicant to delays in the conduct of a study or regulatory review and approval, and/or to administrative or judicial sanctions and adverse publicity. Sanctions may include, but are not limited to, the U.S. Food and Drug Administration, or FDA's, refusal to allow an applicant to proceed with clinical testing, refusal to approve pending applications, withdrawal of an approval, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, debarment, disgorgement of profits and civil or criminal investigations and penalties brought by the FDA or the Department of Justice or other governmental entities.

An applicant seeking approval to market and distribute a new biologic in the United States generally must satisfactorily complete each of the following steps:

- nonclinical laboratory tests, animal studies and formulation studies all performed in accordance with applicable regulations, including the FDA's Good Laboratory Practice, or GLP, regulations;
- submission to the FDA of an IND application for human clinical testing, which must become effective before human clinical trials may begin;
- approval by an Institutional Review Board, or IRB, or ethics committee representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials to establish the safety, potency and purity of the product candidate for each proposed indication, in accordance with applicable regulations, including with GCP regulations;
- after completion of all pivotal clinical trials, preparation and submission to the FDA of a BLA requesting authorization to market the product candidate for one or more proposed indications ;
- satisfactory completion of an FDA advisory committee review, if applicable;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;

- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities, including those of third parties, at which the product, or components thereof, are produced to assess compliance with cGMP requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, safety, strength, quality and purity;
- satisfactory completion of any FDA audits of the clinical study sites to assure compliance with GCPs, and the integrity of clinical data in support of the BLA;
- payment of user fees and securing FDA approval of the BLA; and
- compliance with any post-approval requirements, including the potential requirement to implement a REMS and to conduct any postapproval studies required by the FDA.

Nonclinical Studies and Investigational New Drug Application

Before testing any biologic product candidate in humans, the product candidate must undergo nonclinical testing. Nonclinical tests include laboratory evaluations of product chemistry, formulation and stability, as well as animal studies to evaluate the potential for activity and toxicity. The conduct of the nonclinical tests and formulation of the compounds for testing must comply with federal regulations and requirements. The results of the nonclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, are submitted to the FDA as part of an IND or similar application in other jurisdictions. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for clinical studies. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless within the 30-day time period, the FDA raises concerns or questions about the product or conduct of the proposed clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks, and places the trial on a clinical hold. In that case, the IND sponsor and the FDA must resolve any outstanding FDA concerns before the clinical trial can begin.

As a result, submission of the IND may result in the FDA not allowing the trial to commence or not be conducted on the terms originally specified by the sponsor in the IND. In addition, the FDA may raise concerns or questions at any time after the IND has become effective, and may impose a clinical hold even after clinical studies have initiated. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. A clinical hold issued by the FDA may therefore delay either a proposed clinical study or cause suspension of an ongoing study, until all outstanding concerns have been adequately addressed and the FDA has notified the company that investigation may proceed. This could cause significant difficulties in completing planned clinical trials in a timely manner.

Human Clinical Trials in Support of a BLA

Clinical trials involve the administration of the investigational product candidate to healthy volunteers or patients with the disease to be treated under the supervision of a qualified principal investigator in accordance with GCP requirements. Clinical trials are conducted under study protocols detailing, among other things, the objectives of the study, inclusion and exclusion criteria, the parameters to be used in monitoring safety, dosing procedures and the effectiveness criteria to be evaluated. A separate protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND.

A sponsor who wishes to conduct a clinical trial outside the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of the BLA so long as the clinical trial is well-designed and well-conducted in accordance with GCP, including review and approval by an independent ethics committee, and the FDA is able to validate the study data through an onsite inspection, if necessary.

Further, each clinical trial must be reviewed and approved by an IRB either centrally or individually at each institution at which the clinical trial will be conducted. The IRB will consider, among other things, clinical trial design, patient informed consent, ethical factors and the safety of human subjects. An IRB must operate in compliance with FDA regulations. The FDA, IRB, or the clinical trial sponsor may suspend or discontinue a clinical trial at any time for various reasons, including a finding that the clinical trial is not being conducted in accordance with FDA requirements, the trial is unlikely to meet its stated objectives or that the subjects or patients are being exposed to an unacceptable health risk. Clinical testing also must satisfy extensive GCP rules, including the requirements for informed consent. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group may recommend continuation of the study as planned, changes in study conduct, or cessation of the study at designated check points based on access to certain data from the study.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap or be combined. Additional studies may be required after approval.

- Phase 1 clinical trials are initially conducted in a limited population to test the product candidate for safety, including adverse effects, dose tolerance, absorption, metabolism, distribution, excretion and pharmacodynamics in healthy humans or, on occasion, in patients, such as in the case of some products for severe or life-threatening diseases as cancer, especially when the product may be too inherently toxic to ethically administer to healthy volunteers.
- Phase 2 clinical trials are generally conducted in a limited patient population to identify possible adverse effects and safety risks, preliminarily evaluate the efficacy of the product candidate for specific targeted indications and determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger Phase 3 clinical trials.
- Phase 3 clinical trials proceed if the Phase 2 clinical trials demonstrate that a certain dose or dose range of the product candidate is potentially effective and has an acceptable safety profile. Phase 3 clinical trials are undertaken within an expanded patient population, often at geographically dispersed clinical trial sites, to gather additional information about safety and effectiveness necessary to evaluate the overall benefit-risk relationship of the investigational product and to provide an adequate basis for physician labeling and product approval.

In some cases, the FDA may approve a BLA for a product candidate but require the sponsor to conduct additional clinical trials to further assess the product candidate's safety and effectiveness after approval. Such post-approval trials are typically referred to as Phase 4 clinical trials (or Phase 4). These studies may be used to gain additional experience from the treatment of patients in the intended therapeutic indication and to document a clinical benefit in the case of biologics approved under accelerated approval regulations. Failure to exhibit due diligence with regard to conducting required Phase 4 clinical trials could result in withdrawal of approval for products. Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical trial investigators. Annual progress reports detailing the results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA and the investigators for serious and unexpected adverse events, any findings from other trials, tests in laboratory animals or in vitro testing that suggest a significant risk for human subjects, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. The FDA or the sponsor or its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the

research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological candidate has been associated with unexpected serious harm to patients.

There are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Sponsors of clinical trials of FDA-regulated products, including biologics, are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, trial sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved.

Review and Approval of a BLA

The results of product candidate development, nonclinical testing and clinical trials, including negative or ambiguous results as well as positive findings, are submitted to the FDA as part of a BLA requesting a license to market the product for one or more indications. The BLA must contain extensive chemistry manufacturing and controls information and detailed information on the composition of the product and proposed labeling. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of the product, or from a number of alternative sources, including studies initiated by investigators. The submission of a BLA requires payment of a substantial user fee to the FDA, and the sponsor of an approved BLA is also subject to annual program fees. The FDA adjusts the Prescription Drug User Fee Act, or PDUFA, user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the biological product candidate for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The Food and Drug Administration Safety and Innovation Act, or FDASIA, requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within sixty days after an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. Unless otherwise required by regulation, PREA does not apply to any biological product for an indication for which orphan designation has been granted.

The FDA has 60 days after submission of the application to conduct an initial review to determine whether the BLA is sufficient to accept for filing based on the agency's threshold determination that it is substantially complete so as to permit substantive review. Once the submission has been accepted for filing, the FDA begins an in-depth review of the application. Under the goals and policies agreed to by the FDA under PDUFA, the FDA aims to complete its initial review of a standard application and respond to the applicant within ten months of the 60-day filing date, and for a priority review application within six months. The FDA does not always meet its PDUFA goal dates for standard and priority BLAs, and its review goals are subject to change from time to time. The review process may often be significantly extended by FDA requests for additional information or clarification. The review process and the PDUFA goal date may also be extended by three months if the FDA requests or if the applicant otherwise provides additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA goal date.

The FDA reviews a BLA to determine, among other things, whether the proposed product is safe and potent, or effective, for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP requirements to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA may convene an advisory committee to provide clinical insight on application review questions. Before approving a BLA, the FDA will typically inspect the

facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with cGCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

On the basis of the FDA's evaluation of the application and accompanying information, including the results of the inspection of the manufacturing facilities and any FDA audits of clinical trial sites to assure compliance with GCPs, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. If the application is not approved, the FDA may issue a complete response letter indicating that the review cycle is complete and the application is not ready for approval. A complete response letter will describe the deficiencies that must be addressed in order to secure final approval of the application, and when possible, will outline recommended actions the sponsor might take to obtain approval of the application. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application. The FDA may also request additional information or clarification.

Sponsors that receive a complete response letter who elect to address the deficiencies may submit to the FDA information that represents a complete response to the issues identified by the FDA in the response letter. Such resubmissions are classified under PDUFA as either Class 1 or Class 2, based on the information submitted by an applicant in response to an action letter. Under the goals and policies agreed to by the FDA under PDUFA, the FDA aims to review and act on a Class 1 resubmission with two months of receipt and, with respect to a Class 2 resubmission, within six months of receipt. The FDA will not approve an application until issues identified in the complete response letter have been addressed. The FDA may delay or refuse approval of a BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If the FDA approves a new product, it may limit the approved indications for use of the product, or limit the approval to specific dosages. It may also require development of adequate controls or specifications and that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may call for post-approval studies, including Phase 4 clinical trials, to further assess the product's safety after approval and may limit further marketing of the product based on the results of these post-marketing studies. The agency may also require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, to help ensure that the benefits of the product outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring and the use of patent registries. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS; the FDA will not approve the BLA without a REMS, if required. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. After approval, many types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

Expedited Development and Review Programs

The FDA has a number of programs intended to expedite the development and/or review of new products intended for serious or life-threatening diseases or conditions. These programs include fast track designation, breakthrough therapy designation, priority review, and accelerated approval.

The FDA may issue a fast track designation to a product candidate if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new biologic may request that the FDA designate the biologic as a fast track product at any time during the clinical development of the product. For fast track products, sponsors may have greater interactions with the FDA during product development. A fast track product may also be eligible for rolling review, where the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA. However, the FDA's PDUFA goal for reviewing a BLA fast track application does not begin until the last section of the application is submitted. Fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

A product may be designated as a breakthrough therapy if it is intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to breakthrough therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross-disciplinary project lead for the review team; and taking other steps to facilitate the design of clinical trials in an efficient manner. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product, including involvement of senior managers.

Any marketing application for a biologic submitted to the FDA for approval, including a product with a fast track designation and/or breakthrough therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and accelerated approval. The FDA may designate a product for priority review if it is a product that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines, on a case-by-case basis, whether the proposed product represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes and evidence of safety and effectiveness in a new subpopulation. A priority review is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on an original BLA from ten months to six months from the 60-day filing date.

The FDA may grant accelerated approval to a product for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a condition when the product has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Products granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a product, such as an effect on IMM.

The FDA has stated that although it has limited experience with accelerated approvals based on intermediate clinical endpoints, such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a product.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a product. Thus, accelerated approval has been used extensively in the development and approval of products for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the product's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or to confirm a clinical benefit during post-marketing studies, may lead the FDA to withdraw the product from the market on an expedited basis. All promotional materials for product candidates approved under accelerated regulations are subject to prior review by the FDA.

Fast track designation, priority review, accelerated approval, and breakthrough therapy designation may expedite the development or approval process, but do not change the standards for approval. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Post-Approval Regulation

If regulatory approval for marketing of a product or for a new indication for an existing product is obtained, the sponsor will be required to comply with rigorous and extensive post-approval regulatory requirements as well as any post-approval requirements that the FDA has imposed on the particular product as part of the approval process. The sponsor will be required, among other things, to report certain adverse reactions and production problems to the FDA, provide updated safety and efficacy information and comply with requirements concerning advertising, promotional labeling, product sampling and distribution. Manufacturers and certain of their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMP regulations, which impose certain procedural and documentation requirements upon manufacturers. Accordingly, the BLA-holder and its third-party manufacturers must continue to expend time, money and effort in the areas of production and quality control to maintain compliance with cGMP regulations and other regulatory requirements. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we or our partners may decide to use. In addition, changes to the manufacturing process or facility are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented, and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market study requirements or clinical trial requirements to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, untitled letters or warning letters or holds on post-approval clinical trials;
- adverse publicity;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions, fines, debarment, disgorgement of profits or the imposition of civil or criminal penalties.

The FDA closely regulates marketing, labeling, advertising and promotion of products that are placed on the market. Pharmaceutical products may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict marketing authorization holders' communications on the subject of off-label use of their products.

Orphan Drug Designation

Orphan drug designation in the United States is designed to encourage sponsors to develop products intended for rare diseases or conditions. In the United States, a rare disease or condition is statutorily defined as a disease or condition that affects fewer than 200,000 individuals in the United States or that affects more than 200,000 individuals in the United States but for which there is no reasonable expectation that the cost of developing and making available the product for the disease or condition will be recovered from sales of the product in the United States.

Orphan drug designation qualifies a company for certain financial incentives, including tax advantages, waiver of the BLA application user fee and, if the product receives the first FDA approval for the indication for which it has orphan designation, market exclusivity. Orphan product exclusivity means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years from the approval of the BLA, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. An application for designation as an orphan product can be made any time prior to the filing of an application for approval to market the product.

In addition, a sponsor of a product that is otherwise the same product as an already approved orphan drug may seek and obtain orphan drug designation for the subsequent product for the same rare disease or condition if it can present a plausible hypothesis that its product may be clinically superior to the first product. More than one sponsor may receive orphan drug designation for the same product for the same rare disease or condition, but each sponsor seeking orphan drug designation must file a complete request for designation.

The period of exclusivity begins on the date that the marketing application is approved by the FDA and applies only to the indication for which the product has been designated. The FDA may approve a second application for the same product for a different use or a second application for a clinically superior version of the product for the same use. The FDA cannot, however, approve the same product made by another manufacturer for the same indication during the market exclusivity period unless it has the

consent of the sponsor, the manufacturer makes a showing of clinical superiority over the product with orphan exclusivity, or the sponsor is unable to provide sufficient quantities.

An orphan-designated product may not receive orphan exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, orphan exclusivity in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

Biosimilars and Exclusivity

The BPCIA (under the Affordable Care Act) created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars.

Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles to implementation of the abbreviated approval pathway that are still being worked out by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

The BPCIA is complex and continues to be interpreted and implemented by the FDA. In addition, government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation, and impact of the BPCIA is subject to significant uncertainty.

Regulation and Procedures Governing Approval of Medicinal Products in the European Union

In order to market any product outside of the United States, a company also must comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of products. Whether or not it obtains FDA approval for a product, an applicant will need

to obtain the necessary approvals by the comparable foreign regulatory authorities before it can initiate clinical trials or marketing of the product in those countries or jurisdictions. Specifically, the process governing approval of medicinal products in the European Union generally follows the same lines as in the United States. It entails satisfactory completion of pharmaceutical development, nonclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the medicinal product for each proposed indication.

Clinical Trial Approval

Pursuant to the currently applicable Clinical Trials Directive 2001/20/EC and the Directive 2005/28/EC on GCP, a system for the approval of clinical trials in the European Union has been implemented through national legislation of the Member States. Under this system, an applicant must obtain approval from the competent national authority of each European Union Member State in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the local competent ethics committee has issued a favorable opinion. In April 2014, the European Union adopted a new Clinical Trials Regulation (EU) No 536/2014, which is set to replace the current Clinical Trials Directive 2001/20. This new legislation, which will be directly applicable in all member states, aims at simplifying and streamlining the approval of clinical trials in the European Union by allowing for a streamlined application procedure via a single-entry point and strictly defined deadlines for the assessment of clinical trial applications. The Regulation harmonizes the assessment and supervision processes for clinical trials throughout the European Union, via a Clinical Trials Information System, or CTIS, which will contain the centralized European Union portal and database for clinical trials foreseen by the Regulation. The EMA will set up and maintain CTIS, in collaboration with the competent national authority of each European Union Member State and the European Commission. The Clinical Trials Regulation will only become applicable six months after the European Commission confirms the full functionality of CTIS. Such a confirmation will only occur once CTIS is audited. The CTIS audit is currently planned for December 2020.

Marketing Authorization

To obtain a marketing authorization for a product under the European Union regulatory system, an applicant must obtain Marketing Authorization (MA). There are two types of MAs:

- The Community MA, which is issued by the European Commission through the Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the European Medicines Agency, or EMA, and which is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, advanced therapy medicinal products (such as gene therapies, somatic cell therapies and tissue engineered products), and medicinal products that contain a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU. Under the Centralized Procedure the maximum time frame for the evaluation of a marketing authorization application is 210 days (excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP). Accelerated evaluation might be granted by the CHMP in exceptional cases, when the authorization of a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. Under the accelerated procedure the standard 210-day review period is reduced to 150 days.
- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in other Member States through the Mutual Recognition Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure.

An MA may be granted only to an applicant established in the European Union. Regulation 1901/2006 on Medicinal Products for Pediatric Use provides that prior to obtaining a marketing authorization in the European Union in the centralized procedure, an applicant must demonstrate compliance with all measures included in an EMA-approved Pediatric Investigation Plan covering all subsets of the pediatric population, unless the EMA has granted a product-specific waiver, class waiver, or a deferral for one or more of the measures included in the Pediatric Investigation Plan.

The European Union also provides opportunities for market exclusivity. For example, in the European Union, upon receiving marketing authorization, new chemical entities generally receive eight years of data exclusivity and an additional two years of market exclusivity. If granted, data exclusivity prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic or biosimilar application. During the additional two-year period of market exclusivity, a generic or biosimilar marketing authorization can be submitted, and the innovator's data may be referenced, but no generic or biosimilar product can be marketed until the expiration of the market exclusivity. However, there is no guarantee that a product will be considered by the European Union's regulatory authorities to be a new chemical entity, and products may not qualify for data exclusivity.

Periods of Authorization and Renewals

A marketing authorization is valid for five years, in principle, and it may be renewed after five years on the basis of a reevaluation of the risk-benefit balance by the EMA or by the competent authority of the authorizing Member State. To that end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least nine months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal period. Any authorization that is not followed by the placement of the product on the European Union market (in the case of the centralized procedure) or on the market of the authorizing Member State within three years after authorization ceases to be valid.

Regulatory Requirements after Marketing Authorization

Following approval, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of the medicinal product. These include compliance with the European Union's stringent pharmacovigilance or safety reporting rules, pursuant to which post-authorization studies and additional monitoring obligations can be imposed. In addition, the manufacturing of authorized products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the EMA's cGMP requirements and comparable requirements of other regulatory bodies in the European Union, which mandate the methods, facilities and controls used in manufacturing, processing and packing of products to assure their safety and identity. Finally, the marketing and promotion of authorized products, including industry-sponsored continuing medical education and advertising directed toward the prescribers of products and/or the general public, are strictly regulated in the European Union under Directive 2001/83.

Orphan Drug Designation and Exclusivity

Regulation 141/2000 and Regulation 847/2000 provide that a product can be designated as an orphan drug by the European Commission if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of (1) a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the European Union when the application is made, or (2) a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that the marketing of the product in the European Union would generate sufficient return to justify the necessary investment. For either of these conditions, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention, or treatment of the condition in question that has been authorized in the European Union or, if such method exists, the product has to be of significant benefit compared to products available for the condition.

An orphan drug designation provides a number of benefits, including fee reductions, regulatory assistance and the possibility to apply for a centralized European Union marketing authorization. Orphan drugs also benefit from a 10-year period of market exclusivity. During this market exclusivity period, neither the EMA nor the European Commission or the Member States can accept an application or grant a marketing authorization for a “similar medicinal product.” A “similar medicinal product” is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. The market exclusivity period for the authorized therapeutic indication may, however, be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan drug designation because, for example, the product is sufficiently profitable not to justify market exclusivity. Additionally, marketing authorization may be granted to a similar product for the same indication at any time if the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior, the applicant consents to a second orphan medicinal product application, or applicant cannot supply enough orphan medicinal product.

Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we may obtain regulatory approval. Even if our product candidates are approved for marketing, sales of such product candidates will depend, in part, on the extent to which third-party payors, including government health programs in the United States (such as Medicare and Medicaid), commercial health insurers, and managed care organizations, provide coverage and establish adequate reimbursement levels for such product candidates. In the United States, the Member States of the European Union and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Reimbursement rules and levels are not harmonized in the European Union and therefore differ from Member State to Member State. Patients are unlikely to use any product candidates we may develop unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of such product candidates. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors are increasingly challenging the price and examining the medical necessity and cost effectiveness of medical products and services and imposing controls to manage costs.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, and the cost of these studies would be in addition to the costs required to obtain FDA or other comparable marketing approvals. Even after pharmacogenomic studies are conducted, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payor not to cover any product candidates we may develop could reduce physician utilization of such product candidates once approved and have a material adverse effect on our sales, results of operations and financial condition. Additionally, a payor’s decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. For example, the payor may require co-payments that patients find unacceptably high. Further, one payor’s determination to provide coverage for a product does not assure that such coverage will continue or that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor. Third-party reimbursement and coverage may not be adequate to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. The insurance coverage and reimbursement status of newly approved products for orphan diseases is particularly uncertain, and failure to obtain or maintain adequate coverage and reimbursement for any such product candidates could limit a company’s ability to generate revenue.

The containment of healthcare costs also has become a priority of federal, state and foreign governments as well as other third-party payors such as statutory health insurance funds and the prices of pharmaceuticals have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption

of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue from the sale of any approved products. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive marketing approval, less favorable coverage policies and reimbursement rates may be implemented or coverage may be ended in the future.

Outside the United States, we will face challenges in ensuring obtaining adequate coverage and payment for any product candidates we may develop. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities or other third-party payors such as statutory health insurance funds can extend well beyond the receipt of regulatory marketing approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of any product candidates we may develop to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our commercialization efforts.

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost effectiveness of a particular product candidate to currently available therapies (so-called health technology assessments) in order to obtain reimbursement or pricing approval. For example, the European Union provides options for its Member States to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. European Union Member States may approve a specific price for a product or may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other Member States allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the European Union have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage healthcare expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the European Union. The downward pressure on healthcare costs in general, particularly prescription products, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union Member States and parallel trade (arbitrage between low-priced and high-priced Member States) can further reduce prices. Special pricing and reimbursement rules may apply to orphan drugs. Inclusion of orphan drugs in reimbursement systems tend to focus on the medical usefulness, need, quality and economic benefits to patients and the healthcare system as for any product. Acceptance of any medicinal product for reimbursement may come with cost, use and often volume restrictions, which again can vary by country. In addition, results based rules of reimbursement may apply. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products, if approved in those countries.

Healthcare Laws and Regulations

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of pharmaceutical products that are granted marketing approval. Our current and future arrangements with providers, researchers, consultants, third-party payors and customers are subject to broadly applicable federal and state fraud and abuse, anti-kickback, false claims, physician payment transparency and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Restrictions under applicable federal and state healthcare laws and regulations include, without limitation, the following:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering, or paying remuneration, directly or indirectly, in-cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or a specific intent to violate it in order to have committed a violation;

- the federal civil and criminal false claims laws, including the civil False Claims Act, and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false, fictitious, or fraudulent or knowingly making, using, or causing to be made or used a false record or statement to avoid, decrease, or conceal an obligation to pay money to the federal government. Moreover, the government may assert that a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal laws that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or a specific intent to violate it in order to have committed a violation;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Affordable Care Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the CMS, within the HHS, information related to payments and other transfers of value made by that entity to physicians (as defined by statute), certain other health care providers beginning in 2022, and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- federal government price reporting laws, which require us to calculate and report complex pricing metrics to government programs and which may be used in the calculation of reimbursement and/or discounts on marketed products;
- the Foreign Corrupt Practices Act, a U.S. law which regulates certain financial relationships with foreign government officials (which could include, for example, certain medical professionals); and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private insurers; and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring pharmaceutical manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures and pricing information.

Violations of these laws can subject us to criminal, civil and administrative sanctions including monetary penalties, damages, fines, disgorgement, individual imprisonment and exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of noncompliance with these laws, reputational harm, and we may be required to curtail or restructure our operations. Moreover, we expect that there will continue to be federal and state laws and regulations, proposed and implemented, that could impact our future operations and business.

Data Privacy and Security Laws

We may be subject to, or our marketing activities may be limited by HIPAA and its implementing regulations, which established uniform standards for certain covered entities (healthcare providers, health plans and healthcare clearinghouses) governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information, including, among other requirements, mandatory contractual terms and technical safeguards to protect the privacy, security and transmission of protected health information and notification to affected individuals and regulatory authorities in the event of certain breaches of security of protected health information. The American Recovery and

Reinvestment Act of 2009, commonly referred to as the economic stimulus package, included sweeping expansion of HIPAA's privacy and security standards called the Health Information Technology for Economic and Clinical Health Act, or HITECH, which became effective on February 17, 2010. Among other things, the HITECH makes HIPAA's privacy and security standards directly applicable to business associates, or independent contractors or agents of covered entities, that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions.

Even when HIPAA does not apply, failing to take appropriate steps to keep consumers' personal information secure can constitute unfair acts or practices in or affecting commerce and be construed as a violation of Section 5(a) of the Federal Trade Commission Act, or the FTCA, 15 U.S.C § 45(a). The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards and the FTC's guidance for appropriately securing consumers' personal information is similar to what is required by the HIPAA Security Rule.

State laws may be more stringent, broader in scope or offer greater individual rights with respect to protected health information, or PHI, than HIPAA, and state laws may differ from each other, which may complicate compliance efforts. By way of example, the California Consumer Privacy Act, or CCPA, effective January 1, 2020, gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA may increase our compliance costs and potential liability. In addition, other states may choose to adopt more stringent privacy legislation, which could increase our potential liability and compliance costs and adversely affect our business.

In the European Union and the United Kingdom, we may be subject to strict data protection regulations, in particular with regard to health data of individuals pursuant to Art. 4 Nr. 15 of the GDPR, effective since May 25, 2018. The GDPR, together with national legislation, regulations and guidelines of the European Union member states and the United Kingdom governing the processing of personal data, impose strict obligations with respect to, and restrictions on, the collection, use, retention, protection, disclosure, transfer and processing of personal data. In particular, the GDPR includes obligations and restrictions concerning the consent and rights of data subjects, the transfer of personal data to countries outside the European Union or the United Kingdom, security breach notifications, and other requirements concerning the security and confidentiality of personal data. The GDPR imposes special requirements concerning the protection of special categories of personal data which include health and genetic information of data subjects. These special categories of data may only be processed under certain circumstances, including if the data subject consented to such processing or if (i) processing is necessary in order to protect vital interests of the data subject or of another natural person, in so far as the data subject is unable to provide consent for physical or legal reasons; (ii) the data concerned have manifestly been made public by the data subject; (iii) processing is necessary in order to assert, exercise or defend legal claims; or (iv) processing is necessary for the purposes of scientific research and any additional requirements under applicable data protection laws, including national legislation, regulations and guidelines, are met.

Therefore, we may be subject to and our marketing activities may be limited by the regulations regarding the data protection of individuals according to the GDPR, the German Federal Data Protection Act and other applicable data protection laws. These regulations could also restrict the transfer of data from European Union member states and the United Kingdom to the U.S. The general transfer of personal data outside of the European Union and the United Kingdom is prohibited unless the conditions laid out in Art. 44 et. seq. of the GDPR are fulfilled and an adequate level of data protection can be ensured. Currently the U.S. is not considered to be a country with an adequate level of data protection and further contractual arrangements must be adopted to permit the international transfer of personal data to the U.S. European

data protection authorities may interpret the GDPR and national laws differently and impose additional requirements, which contributes to the complexity of processing personal data in or from the European Union or United Kingdom. Guidance on implementation and compliance practices is regularly updated or otherwise revised. The GDPR has increased our responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with the relevant data protection regimes. Separately, Brexit could also lead to further legislative and regulatory changes and increase our compliance costs. In particular, the United Kingdom has transposed the GDPR into domestic law with a United Kingdom version of the GDPR taking effect in January 2021 (after the end of the transitional period) which could expose us to two parallel regimes each of which potentially authorizes fines for certain violations up to the greater of either 4% of the total global annual turnover of the preceeding financial year or €20 million. For more information regarding the risks related to data security and privacy, see “Risk Factors — Risks Related to Our Business and Industry.”

Our Employees

As of June 30, 2020, we had 484 total employees worldwide, 398 of whom were full-time, 144 of whom hold Ph.D. or M.D. degrees, 161 of whom were engaged directly or indirectly in production, 225 of whom were engaged in research and development activities, 33 of whom were engaged in clinical and regulatory activities, 7 of whom were engaged in marketing and sales activities, and 58 of whom were engaged in management, business development or marketing, finance, human resources or administrative support. Of our 484 total employees, 471 work in Germany and 13 work in the United States. We consider our relationship with our employees to be good. We are not subject to collective bargaining agreements or similar labor contracts and do not have a workers’ council.

Facilities

Our headquarters are in Tübingen, Germany, Friedrich-Miescher-Strasse 15, where we occupy approximately 123,000 square feet of office and laboratory space under a sub-lease agreement entered into with CureVac Real Estate GmbH that started on June 6, 2018. The fixed-term 15-year lease payment period began on March 1, 2020. We also occupy approximately 53,000 square feet of additional office and laboratory space in Tübingen, Germany, Paul-Ehrlich-Strasse 15, under sub-lease agreements also entered into with CureVac Real Estate GmbH, that started on February 1, 2018.

Since 2006, we have operated a manufacturing facility in Tübingen, Germany, the first worldwide GMP-compliant RNA production plant with two multi-product suites. This facility contains approximately 16,145 square feet of laboratory space, including 2,800 square feet of GMP facilities and is dedicated to provide supplies for early clinical development (Phase 1 and 2 of clinical trials). In addition, we have established a third in-house production suit (GMP III) with an up-scaled manufacturing process, which was certified in December 2019. We currently occupy 2,800 square feet of GMP III facility for the production of mRNA. Our GMP III facility is intended to provide supplies for our late-stage clinical studies and anticipated early market supply. These manufacturing facilities are located in Tübingen, Germany, Paul-Ehrlich-Strasse 15 and are leased via the above mentioned sub-lease agreements entered into with CureVac Real Estate GmbH.

We are also constructing a new manufacturing facility, designed for the development of a GMP production process on a large industrial scale, from starting material to formulation, for future market supply (GMP IV). This GMP IV facility, which is intended to produce IMPs that serve our future late stage clinical trials and market supply, is expected to be approximately 86,000 square feet. Currently, we have completed the shell of the GMP IV facility and expect to open it in July 2022.

In addition, we lease land and buildings for our offices. We lease an aggregate of approximately 210,000 square feet, in Germany and the United States. The following table summarizes information with respect to the principal facilities leased by us:

Location	Area (Approximate Sq. Feet)
Germany:	
Tübingen	189,000
Frankfurt am Main	8,600
Total	197,600
United States:	
Boston	12,900
Total	12,900
Total	210,500

Our leases expire on various dates from 2021 to 2035. The lease in Boston, United States, is held by our U.S. subsidiary, CureVac Inc.

Environmental Issues

To the best of our knowledge, currently there are no foreign, federal, state or local environmental laws, rules or regulations that will materially affect our results of operations or our position with respect to our competitors. However, we can provide no assurance of the effect that any possible future environmental laws will have on our operating results.

Legal Proceedings

From time to time, we are subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Although the results of litigation and claims cannot be predicted with certainty, as of the date of this prospectus, we do not believe we are party to any claim or litigation, the outcome of which, if determined adversely to us, would individually or in the aggregate be reasonably expected to have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

Unless otherwise noted, this section presents information about our management upon the consummation of the offering and after giving effect to the corporate reorganization. See “Corporate Reorganization.”

Board Structure

We have a two-tier board structure consisting of a management board (*bestuur*) and a separate supervisory board (*raad van commissarissen*). There are no family relationships among any of our managing directors and supervisory directors.

Management Board

Our management board is expected to be composed of six members, who we refer to as our managing directors (and who, together with our interim chief development officer, we consider to be our executive officers). Following the closing of this offering, each managing director of CureVac N.V. will hold office for the term set by our general meeting (as set forth in the table below), except in the case of his or her earlier death, resignation or removal. Our managing directors do not have a retirement age requirement under our articles of association. The current members of the management board of CureVac AG are expected to be appointed as managing directors of CureVac N.V. prior to the closing of this offering.

Our managing directors are responsible for the management and representation of our company. Our senior management has an average of 17 years of experience in the biopharmaceutical industry. Many of the members of our management team have worked together as a team for many years.

The following table lists our current managing directors who are also executive officers (with the exception of Bernd Winterhalter⁽²⁾), as well as their ages, term served, the year of expiration of their term as managing directors of CureVac N.V. and position:

Name ⁽¹⁾	Age	Term Served	Year in which Term Expires	Position
Franz-Werner Haas, LLD, LLM	50	6/2020 – Present	2022	Chief Executive Officer
Florian von der Mülbe, Ph.D., MBA	48	9/2015 – Present	2023	Chief Production Officer
Mariola Fotin-Mleczek, Ph.D.	53	9/2015 – Present	2023	Chief Technology Officer
Pierre Kemula, B.Sc.	46	11/2016 – Present	2021	Chief Financial Officer
Bernd Winterhalter, MD, Ph.D. ⁽²⁾	61	6/2018 – Present	Not Defined	Chief Development Officer (Interim)
Igor Splawski, Ph.D., MSc	52	7/2020 – Present	2023	Chief Scientific Officer

(1) Dr. Hoerr is not included in this chart, despite being a current managing director of CureVac AG because he is not an executive officer.

(2) We consider Mr. Winterhalter an executive officer and a member of our senior management team but he is not registered in Germany as a member of our management board and will not be appointed as a member of the management board of CureVac N.V. upon the closing of this offering. He serves as our interim chief development officer under a consulting agreement that specifies his service is indefinite and may be terminated by either party with four weeks’ notice.

The following is a brief summary of the prior business experience and principal business activities performed outside of CureVac of our managing directors. Unless otherwise indicated, the current business addresses for each managing director is Friedrich-Miescher-Strasse 15, 72076 Tübingen, Germany.

Franz-Werner Haas, LLD, LLM has been our chief executive officer and chief operating officer since June 2020 and 2018, respectively. Mr. Haas was our chief corporate officer from 2012 until 2018 and our deputy chief executive officer from March 2020 until June 2020. Before joining CureVac, he was Vice President of Operations and Chief Compliance Officer of SYGNIS Pharma AG from May 2005 until March 2012,

where he was responsible for the execution of M&A and capital market transactions. Mr. Haas started his professional career as an Assistant to the Executive Board of a privately held international commercial and service enterprise before assuming several management positions in the life science industry, including Vice President and General Counsel of LION bioscience from 2002 until December 2004. Mr. Haas also served as the General Counsel of Sirona Dental Systems from January 2005 to May 2005. He studied law at the University of Saarbruecken, K.U. Leuven and also holds an LL.M. from the University of Edinburgh.

Florian von der Mülbe, Ph.D., MBA is our chief production officer since October 2018 and managing director of CureVac Real Estate GmbH since February 2017. Dr. von der Mülbe founded CureVac in 2000 together with Dr. Hoerr. Prior to his current position as chief production officer, Dr. von der Mülbe served as our chief operating officer, accountable for a variety of internal functions such as IT, project management, quality, including technical development and manufacturing, where he established the first GMP production for mRNA worldwide. He started his professional career as a trainee at Roche AG. Dr. von der Mülbe is trained in biochemistry and business administration, and he received his Ph.D. in biochemistry from Tübingen University and an MBA from the European School of Business in Reutlingen.

Mariola Fotin-Mleczek, Ph.D. is our chief technology officer since October 2018. She joined CureVac in May 2006 and was responsible for the development and preclinical testing of mRNA technology applied in different therapeutic areas such as: oncology, infectious diseases and protein therapy. Her scientific expertise includes immunology, cell biology, signal transduction, apoptosis and mechanism of cellular uptake. Dr. Fotin-Mleczek was trained in biology at the University of Stuttgart. She is the inventor of multiple mRNA technology-related key patents and she authored more than 30 scientific publications with a focus on mRNA technology.

Pierre Kemula, B.Sc. is our chief financial officer since 2016. Previously, he was the chief financial officer of Pixium Vision from 2014 until 2016, where he successfully contributed to the listing of the company on Euronext in Paris, and Vice President of Corporate Finance, Treasury and Financial Markets, as well as Director of Investor Relations, Vice-President of Investor Relations and Investor Relations Officer at Ipsen from 2008 until 2014. Earlier in his career, Mr. Kemula worked with major strategy consulting firms (Roland Berger, Bossard Consultants and Gemini Consulting). He holds a Bachelor of Science in Management Sciences from the London School of Economics (LSE) in the United Kingdom.

Bernd Winterhalter, MD, Ph.D. is our interim chief development officer since December 2019. He has served as a consultant and interim manager of CureVac since June 2018. Previously, Dr. Winterhalter was the executive medical director of Bristol-Myers Squibb for European markets, Turkey and Russia from 2012 until 2018 and executive medical director for Germany from 2004 until 2011, where he successfully contributed to the clinical development and market introduction of 15 new products in multiple therapeutic areas, as well as Vice President Medical and Science and Health Economics at Pharmacia (Pfizer) in Germany from 1997 to 2003. Earlier in his career, Dr. Winterhalter worked as ward physician at the department of internal medicine I (medical oncology and hematology) at the university hospital Albert Ludwigs University Freiburg. He is a board certified specialist of internal medicine since 1993 and holds a Ph.D. and an MD degree from Albert Ludwigs University in Freiburg.

Igor Splawski, Ph.D., MSc is our chief scientific officer since July 2020. Prior to joining us, Dr. Splawski was an executive director at the Novartis Institutes for BioMedical Research (NIBR) Biologic Center since 2018, and director from 2016 until 2018. Previously, he was a director in the cardiovascular and metabolism disease area at NIBR from 2009 until 2016 and a senior investigator in ophthalmology at NIBR from 2005 to 2009. At NIBR, Dr. Splawski successfully led over 100 scientists in identifying and evaluating protein, mRNA and AAV targets, and discovered mRNA technology for antibody generation. His work at Novartis contributed to 10 clinical antibodies and proteins, which have achieved 8 positive proof-of-concept trials. Earlier in his career, he served as an associate at both the Howard Hughes Medical Institute and the Children's Hospital in Boston. Dr. Splawski acted as an assistant professor and instructor at Harvard Medical School, where he identified genes for inherited and drug-induced disorders. Dr. Splawski is the inventor on 26 patents and author of 22 research publications. Dr. Splawski holds a PhD in human genetics from the University of Utah and a MSc in biotechnology from Sofia University.

Supervisory Board

Our supervisory board is expected to be composed of at least three and up to eight members, but no less than the number of supervisory directors as are necessary in order to allow dievini and KfW to

exercise their respective nomination rights under our articles of association. Following the closing of this offering, each supervisory director will hold office for the term set by our general meeting (as set forth in the table below), except in the case of his earlier death, resignation or removal. Our supervisory directors do not have a retirement age requirement under our articles of association. The current members of the supervisory board of CureVac AG are expected to be appointed as supervisory directors of CureVac N.V. upon the closing of this offering.

The following table sets forth the names and functions of our current supervisory directors, their ages, term served and the year of expiration of their term as supervisory directors of CureVac N.V.:

Name	Age	Term Served	Year in which Term Expires	Functions
Baron Jean Stéphane, MSc, MBA	70	8/2015 – Present	2024	Chairman and Supervisory Director
Ralf Clemens, MD, Ph.D.	68	8/2015 – Present	2024	Supervisory Director
Mathias Hothum, Ph.D.	53	8/2015 – Present	2024	Supervisory Director
Hans Christoph Tanner, Ph.D.	69	8/2015 – Present	2024	Supervisory Director
Friedrich von Bohlen und Halbach, Ph.D.	58	8/2015 – Present	2022	Vice Chairman and Supervisory Director
Timothy M. Wright, MD	64	6/2019 – Present	2022	Supervisory Director
Craig A. Tooman, MBA	54	6/2019 – Present	2022	Supervisory Director

The following is a brief summary of the prior business experience and principal business activities performed outside of CureVac of our supervisory directors. Unless otherwise indicated, the current business addresses for each of our supervisory directors is Friedrich-Miescher-Strasse 15, 72076 Tübingen, Germany.

Baron Jean Stéphane, MSc, MBA has served as a supervisory director since 2015. Since 2018 Mr. Stéphane serves as the Chairman of the board at Bone Therapeutics. Mr. Stéphane was the CEO of GSK Biologicals from 1989 until 2012 and the President of GSK Biologicals from 2002 until 2012, where he was instrumental in building one of the world's leading vaccine companies. In 1974 Mr. Stéphane joined SmithKline-Rit, as engineer in biology in research and development. He also served as the President of UWE (Union Wallonne des Entreprises) from 1997 until 2000. Mr. Stéphane was the chairman of BESIX Group S.A./N.V. and TiGenix N.V., IBA Wallonia Foreign Trade and Investment Agency, Henogen S.A., Aseptic Technologies. He was also a director of Fortis bank, GBL and Bone Therapeutics.

Ralf Clemens, MD, Ph.D. has served as a supervisory director since 2015. Dr. Clemens is principal and founder of Grid Europe Ltd. Consulting (Global Research in Infectious Diseases) since 2015. Dr. Clemens has been working in the pharmaceutical industry since 1988 in various senior scientific and business positions. He led the global vaccine development at Novartis from 2006 until 2012. Prior to this position, Dr. Clemens served as a Senior Vice President and Head of Development for the Global Vaccine Business Unit at Takeda Pharmaceuticals International, Inc. from 2012 until 2014 and as the Head of GSK Biologicals' vaccine development and Latin American business strategy from 1992 until 2006. During these years, Mr. Clemens developed and brought to licensure more than 25 different vaccines globally. He currently serves as a Member of the Board of Trustees of the International Vaccine Institute IVI in Seoul, Korea and as external scientific advisor to the Bill & Melinda Gates Foundation. He is a member of the Selection Committee of GHIT Tokyo, Japan and a member of the Scientific Committee of CEPI, Oslo, Norway. He graduated with an M.D. from the University of Mainz, Germany and holds an executive business degree from the Wharton Business School.

Mathias Hothum, Ph.D. has served as a supervisory director since 2015. Dr. Hothum is the managing director of dievini Hopp BioTech holding GmbH & Co. KG, or dievini. dievini manages the biotech investments of SAP co-founder Dietmar Hopp. For the past 25 years, Dr. Hothum has worked as a health economist in the healthcare, health services and life sciences sectors. Dr. Hothum specializes in financing, pricing, reimbursement and in the evaluation of mid-sized companies, as well as of publicly owned/

market-listed companies. He is the owner and founder of HMM-Consulting. Furthermore, Dr. Hothum serves as a supervisory director of a few biotech companies, including Heidelberg Pharma AG, Apogenix GmbH, Cytonet GmbH, Novaliq GmbH, Molecular Health GmbH and Joimax GmbH. He received his Ph.D. in economics from the University of Magdeburg and degree in Economics from the University of Mannheim.

Hans Christoph Tanner, Ph.D. has served as a supervisory director since 2015. Since 2015 Dr. Tanner is the chief financial officer and head of investor relations of Cassiopea S.p.A. He served as Cosmo Pharmaceuticals N.V.'s chief financial officer from 2006 until 2016, head of investor relations from 2006 until 2017 and head of transactions office from 2017-2020. Dr. Tanner has also served as a board member of Cosmo Pharmaceuticals N.V. since 2006, where in 2020 he became a Non-Executive Director. Dr. Tanner is also a member of the supervisory board or advisory board (Beirat) of DKSH AG, Paion AG since 2017, Qvanteq AG since 2011, and Joimax GmbH since 2003. He received his Ph.D. in economics and a diploma as an economist from the University of St. Gallen. From 1998 to 2001 he was a partner of Dr. Ernst Mueller-Moehl and co-founder of the 20 Minuten group of newspapers and founded A&A Active Investor, a SIX listed investment company. From 1992 to 1998 Dr. Tanner was the head of corporate finance & capital markets of UBS in Zurich and from 1976 to 1991 he had various functions in the Corporate Banking Department of UBS in Zurich, Madrid and Los Angeles.

Friedrich von Bohlen und Halbach, Ph.D. has served as a supervisory director since 2015. Dr. von Bohlen und Halbach is the managing partner and co-founder of dievini. dievini manages the life science activities and investments of Dietmar Hopp, co-founder of SAP, and his family. Between 1992 to 1997 he held various positions at Fresenius AG, FAG Kugelfischer KGaA and WASAG Chemie AG. In 1997, Dr. von Bohlen und Halbach founded LION bioscience, AG and served as its CEO until 2003. He is chairman of the Board of Apogenix AG and Novaliq GmbH, and board member of AC Immune SA, CureVac AG, immatics biotechnologies GmbH, Heidelberg Pharma AG and Co-Chair of the Evaluation Board of the Wyss Translational Center Zurich. Friedrich is also co-founder and managing director of Molecular Health GmbH. Dr. von Bohlen und Halbach received his Ph.D. in neurobiology from the Swiss Federal Institute of Technology (ETH) in Zurich and a diploma in biochemistry from the University of Zurich.

Timothy M. Wright, MD has served as a supervisory director since 2019. Since 2019 Dr. Wright is a General Partner at TIME BioVentures, and has also served as director of Schrodinger since 2015. Dr. Wright served as the Chief Research and Development Officer for Regulus Therapeutics from 2016 until 2019. Prior to Regulus, he served as Executive Vice President of Translational Science at California Institute for Biomedical Research Between from 2015 until 2016. Between 2004 to 2014, Dr. Wright held positions of increasing importance at Novartis and Novartis Institute for Biomedical Research, culminating as Global Head of Pharma Development. He also served in roles of increasing importance at Pfizer, ultimately as Senior Director, Clinical Sciences / Clinical Exploratory Head — Inflammation between 2001 until 2004. Dr. Wright was Assistant Professor, Associate Professor with tenure, Chief of Rheumatology and Clinical Immunology, and Director of the UPMC Arthritis Institute at the University of Pittsburgh from 1991 until 2001. From 1983 to 1991, Dr. Wright was a postdoctoral fellow, Instructor and Assistant Professor at the Johns Hopkins University School of Medicine. Dr. Wright received a B.A. in Biology from the University of Delaware and an M.D. from the Johns Hopkins University School of Medicine, where he also completed post-doctoral training.

Craig A. Tooman, MBA has served as a supervisory director since 2019. Since September of 2019, Mr. Tooman has served as the COO/CFO of Vyome Therapeutics, Inc. Prior to this, he was the President, CEO and Board Director at Aratana Therapeutics Inc. and led the merger of Aratana with Elanco Animal Health in July of 2019. He has served at Aratana since 2013. From 2012 to 2014, Mr. Tooman served as the Chief Executive Officer and Treasurer of Avanzar Medical, Inc., a company focused on oncology. He also founded Stockbourne LLC in 2011 and remains a Principal. Mr. Tooman served as the Chief Financial Officer and Senior Vice President of Finance at Ikaria, Inc. from 2010 until 2011. Before that, he served as the Executive Vice President of Finance and Chief Financial Officer of Enzon Pharmaceuticals Inc. from 2005 until 2010. and played a key role in the merger with Sigma Tau. Mr. Tooman was the Senior Vice President of Strategic Planning and Corporate Communications of ILEX Oncology Inc., and led the integration of the company with the Genzyme Corporation in 2004. Prior to this, he served in senior positions of increasing responsibility, including Vice President of Investor Relations, at Pharmacia Corporation and

its predecessor company, Pharmacia & Upjohn. He received a Master of Business Administration degree in finance from the University of Chicago and a Bachelor of Arts degree in economics from Kalamazoo College.

Committees

Audit Committee

The audit committee, which is expected to consist of Hans Christoph Tanner (as chairman), Jean Stéphenne, Mathias Hothum and Craig A. Tooman, will assist the supervisory board in overseeing our accounting and financial reporting processes and the audits of our financial statements. In addition, the audit committee will be responsible for the appointment, compensation, retention and oversight of the work of our independent registered public accounting firm. Our supervisory board has determined that Hans Christoph Tanner, Baron Jean Stephenne and Craig A. Tooman satisfy the “independence” requirements set forth in Rule 10A-3 under the Exchange Act and qualifies as an “audit committee financial expert,” as such term is defined in the rules of the SEC. The composition of our audit committee is consistent with the best practice provisions of the DCGC.

We intend to rely on the phase-in rules of the SEC and Nasdaq with respect to the independence of our audit committee. These rules require that all members of our audit committee must meet the independence standard for audit committee membership within one year of the effectiveness of the registration statement of which this prospectus forms a part. The audit committee will be governed by a charter that complies with applicable Nasdaq rules, which charter will be posted on our website prior to the listing of our common shares on Nasdaq.

Compensation Committee

The compensation committee is expected to consist of Mathias Hothum (as chairman), Friedrich von Bohlen und Halbach, Hans Christoph Tanner and Craig A. Tooman. The compensation committee will assist the supervisory board in determining compensation for our executive officers and our managing directors and supervisory directors. The composition of our compensation committee deviates from the best practice provisions of the DCGC, because half of its members are not independent within the meaning of the DCGC because of their affiliation with dievini.

Under SEC and Nasdaq rules, there are heightened independence standards for members of the compensation committee, including a prohibition against the receipt of any compensation from us other than standard director fees. As permitted by the listing requirements of Nasdaq, we will opt out of Nasdaq Listing Rule 5605(d), which requires that a compensation committee consist entirely of independent supervisory directors. The compensation committee will be governed by a charter that will be posted on our website prior to the listing of our common shares on Nasdaq.

Nomination and Corporate Governance Committee

The nomination and corporate governance committee is expected to consist of Mathias Hothum (as chairman), Friedrich von Bohlen und Halbach, Hans Christoph Tanner and Craig A. Tooman. The nomination and corporate governance committee will assist our supervisory board in identifying individuals qualified to become our managing directors or supervisory directors consistent with criteria established by us and in developing our code of business conduct and ethics. The composition of our nomination and corporate governance committee deviates from the best practice provisions of the DCGC, because half of its members are not independent within the meaning of the DCGC because of their affiliation with dievini.

As permitted by the listing requirements of Nasdaq, we will opt out of Nasdaq Listing Rule 5605(e), which requires independent director oversight of director nominations. The nominating and corporate governance committee will be governed by a charter that will be posted on our website prior to the listing of our common shares on Nasdaq.

Special Committee

Resolutions of our supervisory board to approve a resolution of our management board to exclude or limit pre-emption rights (except in connection with the ordinary operation of our equity incentive plans)

or to issue shares against non-cash contribution, shall require the approval of a special committee consisting of one supervisory director nominated by dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for dievini), one supervisory director nominated by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for KfW) and, if applicable, one supervisory director nominated by a nomination concert. In this special committee, the affirmative votes of one supervisory director nominated by dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for dievini) and the supervisory director nominated by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for KfW) shall be required. See "Comparison of Dutch Corporate Law and U.S. Corporate Law — Corporate Governance — Duties of Managing and Supervisory Directors."

Remuneration and Other Benefits to Supervisory and Managing Directors for the Year Ended December 31, 2019

As a foreign private issuer, in accordance with Nasdaq listing requirements, we will comply with home country compensation requirements and certain exemptions thereunder rather than complying with Nasdaq compensation requirements. Dutch law does not provide for limitations with respect to the aggregate annual compensation paid to our managing directors or supervisory directors, provided that such compensation is consistent with our compensation policy. Such compensation policy requires approval by our general meeting. The supervisory board determines the remuneration of individual managing directors with due observance of the compensation policy. A proposal with respect to remuneration schemes in the form of shares or rights to shares in which managing directors may participate is subject to approval by our general meeting. Such a proposal must set out at least the maximum number of shares or rights to subscribe for shares to be granted to the managing directors and the criteria for granting or amendment. The compensation for our supervisory directors is set by the general meeting.

Our compensation policy will authorize our supervisory board to determine the amount, level and structure of the compensation packages of our managing directors at the recommendation of our compensation committee. These compensation packages may consist of a mix of fixed and variable compensation components, including base salary, short-term incentives, long-term incentives, fringe benefits, severance pay and pension arrangements, as determined by our supervisory board.

Supervisory Board

Compensation of Supervisory Directors

For the year ended December 31, 2019, the aggregate compensation accrued or paid to our supervisory directors for services in all capacities was €510,276. The following table sets forth the aggregate compensation and benefits provided to our supervisory board members in the year ended December 31, 2019.

Name	Fixed Compensation (€)	Attendance Fees (€)	Total Compensation (€)
Baron Jean Stéphane	82,500		82,500
Ralf Clemens	55,000	27,500	82,500
Mathias Hothum	55,000		55,000
Hans Cristoph Tanner	55,000	27,500	82,500
Friedrich von Bohlen und Halbach	55,000		55,000
Ingmar Hoerr ⁽¹⁾	110,000		110,000
Timothy M. Wright	21,389		21,388
Craig A. Tooman	21,389		21,388

(1) On March 10, 2020, the service agreement with Daniel Menichella (the former CEO) was discontinued. He was succeeded on the management board by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering.

Share Ownership of Supervisory Directors

The following table sets forth the share ownership of our supervisory directors as of December 31, 2019.

Name	Number of Shares	Percentage of Shares Outstanding	Voting Rights
Baron Jean Stéphane	—	—	—
Ralf Clemens	—	—	—
Mathias Hothum	—	—	—
Hans Cristoph Tanner	1,414	0.20%	(2)
Friedrich von Bohlen und Halbach	1,818	0.24%	(3)
Ingmar Hoerr ⁽¹⁾	8,485	1.14%	(4)
Timothy M. Wright	—	—	—
Craig A. Tooman	—	—	—

(1) On March 10, 2020, the service agreement with Daniel Menichella (the former CEO) was discontinued. He was succeeded on the management board by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering. Of his 8,485 shares, 85 are Series A shares and 8,400 are Series C shares.

(2) Dr. Tanner holds Series A shares, each of which carries one vote per share.

(3) Dr. Halbach holds Series A shares, each of which carries one vote per share.

(4) Dr. Hoerr holds Series A shares and Series C shares, each of which carries one vote per share.

Option Ownership of Supervisory Directors

The following table sets forth the option ownership of our supervisory directors as of December 31, 2019.

Name	Number of Options	Title	Amount of Securities (€)	Exercise Price (€)	Purchase Price (€)	Expiration Date
Baron Jean Stéphane	—	—	—	—	—	—
Ralf Clemens	—	—	—	—	—	—
Mathias Hothum	—	—	—	—	—	—
Hans Cristoph Tanner	—	—	—	—	—	—
Friedrich von Bohlen und Halbach	—	—	—	—	—	—
Ingmar Hoerr ⁽¹⁾	2,776	Share Option Awards	2,776	1.00	2,776	12/31/2021
Timothy M. Wright	—	—	—	—	—	—
Craig A. Tooman	—	—	—	—	—	—

(1) On March 10, 2020, the service agreement with Daniel Menichella (the former CEO) was discontinued. He was succeeded on the management board by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering.

Management Board

Compensation of Managing Directors

For the year ended December 31, 2019, the aggregate compensation accrued or paid to our managing directors for services in all capacities was €3,314,153 (including an approximate conversion of Mr. Menichella's and Mr. Voliotis's compensation from USD to euros and excluding the severance payment to Mr. Voliotis). The following table sets forth the compensation and benefits provided to our management board in the year ended December 31, 2019.

Name*	Salary (€)	Bonus (€) ⁽³⁾	All Other Compensation ⁽⁴⁾ (€)	Total Compensation (€)
Daniel L. Menichella ⁽¹⁾⁽²⁾	508,455 ⁽³⁾	206,250	37,098	751,803
Florian von der Mülbe	250,000	84,375	25,634	360,009
Mariola Fotin-Mleczeck	210,000	70,875	12,977	293,852
Franz-Werner Haas	247,000	111,150	25,442	383,592
Pierre Kemula ⁽⁵⁾	250,000	84,375	146,103	480,478
Bernd Winterhalter ⁽⁶⁾	—	—	333,601	333,601
Dimitris Voliotis ⁽⁷⁾⁽²⁾	425,208	168,760	—	593,958
Ulrike Gnad-Vogt ⁽⁸⁾	187,500	63,281	9,732	260,513

(1) On March 10, 2020, the service agreement with Daniel Menichella (the former CEO) was discontinued. He was succeeded on the management board by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering.

(2) Compensation is expressed in USD. Mr. Menichella also holds 29,053 options. See note 9.4 to our consolidated financial statements, contained elsewhere in this prospectus, for further information on Mr. Menichella's options.

(3) This amount represents the annual variable payment received based on a percentage of yearly gross remuneration for reaching certain targets agreed upon with the supervisory board.

(4) All other compensation includes other monetary benefits and contributions to social security insurance, if any.

(5) Mr. Kemula also holds 5,000 Beteiligungspunkte (virtual shares). See note 9.2 to our consolidated financial statements, contained elsewhere in this prospectus, for further information on Mr. Kemula's award.

(6) We consider Mr. Winterhalter an executive officer and a member of our senior management team but he is not registered in Germany as a member of our management board and will not be appointed as a member of the management board of CureVac N.V. upon the closing of this offering. He serves as our interim chief development officer under a consulting agreement dated as of December 14, 2019 that specifies his service is indefinite and may be terminated by either party with four weeks' notice. Amount included in his total compensation column includes reimbursement for travel and out-of-pocket expenses.

(7) Mr. Voliotis commenced employment effective January 28, 2019 and resigned from our management board effective December 2019, with his actual employment ending on January 11, 2020. The amount shown as bonus payment does not include the severance payment made to him in 2020.

(8) Ms. Gnad-Vogt resigned from our management board effective September 30, 2019.

* Mr. Splawski is not included in this table because he was not a managing director until July 15, 2020.

We did not provide pension, retirement or similar benefits to our managing directors and supervisory directors board in the year ended December 31, 2019.

Share Ownership of Managing Directors

The following table sets forth the share ownership of our managing directors as of December 31, 2019.

Name*	Number of Shares	Percentage of Shares Outstanding	Voting Rights
Daniel L. Menichella ⁽¹⁾	—	—	—
Florian von der Mülbe	6,162 ⁽²⁾	0.83%	⁽³⁾
Mariola Fotin-Mleczeck	—	—	—
Franz-Werner Haas	—	—	—
Pierre Kemula	—	—	—
Bernd Winterhalter ⁽⁴⁾	—	—	—
Dimitris Voliotis	—	—	—
Ulrike Gnad-Vogt	—	—	—

(1) On March 10, 2020, the service agreement with Daniel Menichella (the former CEO) was discontinued. He was succeeded on the management board by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering.

(2) Of such shares, 62 are Series A shares and 6,100 are Series C shares.

(3) Mr. Mülbe holds both Series A and Series C shares, each of which carries one vote per share.

(4) We consider Mr. Winterhalter an executive officer and a member of our senior management team but he is not registered in Germany as a member of our management board and will not be appointed as a member of the management board of CureVac N.V. upon the closing of this offering. He serves as our interim chief development officer under a consulting agreement dated as of December 14, 2019 that specifies his service is indefinite and may be terminated by either party with four weeks' notice. Amount included in his total compensation column includes reimbursement for travel and out of pocket expenses.

* Mr. Splawski is not included in this table because he was not a managing director until July 15, 2020.

Option Ownership of Managing Directors

The following table sets forth the option ownership of our managing directors as of December 31, 2019.

Name*	Number of Options	Title	Amount of Securities (€)	Exercise Price (€)	Purchase Price (€)	Expiration Date
Daniel Menichella ⁽¹⁾	—	—	—	—	—	—
Florian von der Mülbe	2,017	Share Option Awards	2,017	1.00	2,017	12/31/2021
Mariola Fotin-Mleczek	—	—	—	—	—	—
Franz-Werner Haas	—	—	—	—	—	—
Pierre Kemula	—	—	—	—	—	—
Bernd Winterhalter ⁽²⁾	—	—	—	—	—	—
Dimitris Voliotis	—	—	—	—	—	—
Ulrike Gnad-Vogt	—	—	—	—	—	—

(1) On March 10, 2020, the service agreement with Daniel Menichella (the former CEO) was discontinued. He was succeeded on the management board by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering. Under the terms of the Menichella Employment Agreement, Mr. Menichella is entitled to receive up to 29,053 options. See note 9.4 to our consolidated financial statements, contained elsewhere in this prospectus, for further information on Mr. Menichella's options.

(2) We consider Mr. Winterhalter an executive officer and a member of our senior management team but he is not registered in Germany as a member of our management board and will not be appointed as a member of the management board of CureVac N.V. upon the closing of this offering. He serves as our interim chief development officer under a consulting agreement that specifies his service is indefinite and may be terminated by either party with four weeks' notice.

* Mr. Splawski is not included in this table because he was not a managing director until July 15, 2020.

Virtual Share ("VS") Ownership of Management Board Members from VSOP Programs

Management Board VS Status as of December 31, 2019

Name	Program	VS Points Granted	Max Vested Points	Start of Vesting Period (Only for New Participants)	Grant date (Date of Allocation Letter)	Vesting Period	VSOP Plan	Valid until
Florian von der Mülbe	VS	778	778		01.01.2009	36	Prior VSOP	31.12.2025
Florian von der Mülbe	VS	3,486	3,486		01.01.2011	36	Prior VSOP	31.12.2025
Florian von der Mülbe	VS	736	736		01.01.2013	36	Prior VSOP	31.12.2025
Florian von der Mülbe	VS	1,522	1,522		01.01.2015	12	Prior VSOP	31.12.2025
Florian von der Mülbe	VS	6,100	6,100		11.12.2015	12	Prior VSOP IPO only	31.12.2025
Mariola Fotin-Mleczek	VS	316	316		01.01.2009	60	Prior VSOP	31.12.2025
Mariola Fotin-Mleczek	VS	250	250		01.01.2013	36	Prior VSOP	31.12.2025
Mariola Fotin-Mleczek	VS	250	250		01.01.2014	36	Prior VSOP	31.12.2025
Mariola Fotin-Mleczek	VS	250	250		01.01.2015	36	Prior VSOP	31.12.2025
Mariola Fotin-Mleczek	VS	2,327	2,327		01.01.2015	12	Prior VSOP	31.12.2025
Ulrike Gnad-Vogt	VS	682	682		01.07.2011	60	Prior VSOP	31.12.2025
Ulrike Gnad-Vogt	VS	250	250		01.01.2013	36	Prior VSOP	31.12.2025
Ulrike Gnad-Vogt	VS	250	250		01.01.2014	36	Prior VSOP	31.12.2025
Ulrike Gnad-Vogt	VS	250	250		01.01.2015	36	Prior VSOP	31.12.2025

<u>Name</u>	<u>Program</u>	<u>VS Points Granted</u>	<u>Max Vested Points</u>	<u>Start of Vesting Period (Only for New Participants)</u>	<u>Grant date (Date of Allocation Letter)</u>	<u>Vesting Period</u>	<u>VSOP Plan</u>	<u>Valid until</u>
Ulrike Gnad-Vogt	VS	1,961	1,961		01.01.2015	12	Prior VSOP	31.12.2025
Franz-Werner Haas	VS	1,400	1,400		01.06.2012	36	Prior VSOP	31.12.2025
Franz-Werner Haas	VS	3,600	3,600		01.01.2013	36	Prior VSOP	31.12.2025
Franz-Werner Haas	VS	1,522	1,522		01.01.2015	12	Prior VSOP	31.12.2025
Pierre Kemula	VS	5,000	5,000	01.10.2016	18.04.2019	36	Prior VSOP	31.12.2025
Daniel Menichella*	*	29,053	29,053	08.01.2017	14.10.2019	48	*	08.01.2027

* Daniel Menichella: New Plan – Kick in price at a valuation of USD 800 million. See note 9.4 to our consolidated financial statements, contained elsewhere in this prospectus, for further information on Mr. Menichella’s New Plan.

Service Agreements

Supervisory Board Service Contract

With the approval of the supervisory board, Dr. Clemens, one of our supervisory directors, has entered into a service agreement with us, which provides for notice of termination periods and include restrictive covenants, as described further below.

Consulting Agreement with Ralf Clemens

We entered into a consulting agreement with Dr. Clemens in March 2013 (the “Clemens Consulting Agreement”) whereby Dr. Clemens agreed to provide consulting services and agreed to act as a member of our scientific advisory board for an indefinite period. The Clemens Consulting Agreement provides for a notice of termination period of four weeks, payment of certain travel and out-of-pocket expenses in addition to his consulting fee and restrictive covenants, including covenants related to confidentiality and proprietary information.

Employment Agreements and Consultancy Agreement with Ingmar Hoerr

We entered into several management agreements with Dr. Hoerr in 2003, 2005 and 2011, which were superseded by the management agreement we entered with him in 2015, which is substantially similar to the Management Contracts entered with the management board members as described above.

In June 2018, Dr. Hoerr was elected as a supervisory director. We subsequently entered into a Consultancy Agreement with Dr. Hoerr (the “Hoerr Consultancy Agreement”) whereby Dr. Hoerr agreed to provide consulting services. The Hoerr Consultancy Agreement provides for a notice of termination period of four weeks, payment of certain travel and out-of-pocket expenses in addition to his consulting fee and restrictive covenants, including a four-year non-competition and covenants related to confidentiality and ownership of work product. For additional details of Dr. Hoerr’s Consultancy Agreement, see “Related Party Transactions.”

On March 10, 2020, Dr. Hoerr succeeded Mr. Menichella as a managing director on the management board. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering.

Management Board Service Contracts

We entered into a management board services contract with the following managing directors: Mr. Mülbe, Ms. Fotin-Mleczek, Mr. Haas, Mr. Kemula and Mr. Splawski (“Management Contracts”). The Management Contracts generally provide for a term of either three or five years and a base salary and an annual variable payment expressed as a percentage of annual base salary that is dependent on the achievement of the objectives agreed to by the supervisory board. The supervisory board is also entitled to grant managing directors additional compensation at its discretion.

The Management Contracts also provide for additional allowances. The managing directors are also eligible to participate in a virtual stock plan or equivalent plan that is established in a manner substantially similar to other of the senior executives.

The Management Contracts provide for the following restrictive covenants: (i) a non-compete during employment and for 12 months after termination; (ii) a non-solicit of employees during employment and for two years after termination; and (iii) a perpetual confidentiality covenant. Under the Management Contracts, we are obligated to pay the managing directors compensation for the duration of their post-employment non-compete in monthly installments that are equal to half of the total compensation they received prior to their termination.

We may in the future enter into service agreements with other individuals, the terms of which may provide for, among other things, cash or equity-based compensation and benefits.

Employment Agreements with Daniel Menichella

In January 2017, we entered into an employment agreement with Daniel Menichella which provided that Mr. Menichella will serve as the Chief Executive Officer (“CEO”) of CureVac Inc. (the “Prior Menichella Agreement”). In June 2018, we entered into an employment agreement with Mr. Menichella (“Menichella Employment Agreement”), which terminated and replaced the Prior Menichella Agreement, under which Mr. Menichella became the CEO of CureVac AG in addition to CureVac Inc. Under the Menichella Employment Agreement, Mr. Menichella is entitled to receive an initial base salary of \$500,000 and is eligible to receive a discretionary bonus in a target amount of up to 55% of his base salary conditioned upon our financial performance and Mr. Menichella meeting certain agreed upon performance goals established jointly with our management board and our Board of Directors. Mr. Menichella is also entitled to the specified allowances and perquisites under the Menichella Employment Agreement, including reimbursement of certain expenses (i.e., moving expenses) and commuting, housing and vehicle allowances.

Under the terms of the Menichella Employment Agreement, Mr. Menichella is also entitled to receive up to 29,053 options, which provide Mr. Menichella with a cash claim against CureVac AG, which can be settled in shares of CureVac AG, subject to the terms and conditions of his employment agreement, equal to an amount by which the price per share calculated on the basis of the value to the company with 726,592 outstanding shares of \$800,000,000 is surpassed by the price per share calculated on the basis of the fair market value of CureVac AG at the time of the exercise of the option. Such options expire on January 8, 2027.

If Mr. Menichella’s employment is terminated for convenience or if he resigns with good reason (as such term is defined in the Menichella Employment Agreement), subject to his execution and nonrevocation of a release, he is entitled to the following: (i) 18 months of his then base salary (or 24 months if such termination is within one year following the consummation of a change in control); (ii) a pro rata portion of his discretionary bonus, if any, for the year of termination, (iii) reimbursement of the employer-contributed portion of Mr. Menichella’s health care premiums for 18 months, (iv) 18 month acceleration of stock option vesting if employment is terminated within one year following the consummation of a change in control and (v) acceleration of all unvested stock options if CureVac is merged with another company or CureVac completes an IPO.

The Menichella Employment Agreement provides for the following restrictive covenants: (i) a non-compete during employment and for 18 months after termination; (ii) a non-solicit of customers and employees during employment and for 18 months after termination, (iii) a perpetual confidentiality and non-disparagement covenant and (iv) ownership of intellectual property and inventions covenant.

On March 10, 2020, the Menichella Employment Agreement was discontinued and Mr. Menichella ceased to be a member of our management board. He was succeeded by Dr. Hoerr on that same day. Dr. Hoerr is currently a managing director of CureVac AG but shall not be appointed as managing director of CureVac N.V. upon the consummation of this offering.

Consulting Agreement with Bernd Winterhalter

We entered into a consulting agreement with Dr. Winterhalter in June 2018 (the “Winterhalter Consulting Agreement”) whereby Dr. Winterhalter agreed to provide consulting services for an indefinite

period of time. The Winterhalter Consulting Agreement provides for a notice of termination period of four weeks, payment of certain travel and out-of-pocket expenses in addition to his consulting fee and restrictive covenants, including covenants related to confidentiality and proprietary information.

Offer Letter with Pierre Kemula

We entered into an offer letter with Pierre Kemula in April 2019 (the “Kemula Offer Letter”) to prolong his service on the management board pursuant to the Management Contract, entered into in June 2016, and to include additional terms, including the reimbursement of certain costs. The Kemula Offer Letter also provides that Mr. Kemula will receive, under the VSOP program, 5,000 Beteiligungspunkte (virtual shares). See note 9.2 to our consolidated financial statements, contained elsewhere in this prospectus, for further information on Mr. Kemula’s award.

Employment Agreement and Separation Agreement with Dimitris Voliotis

We entered into an employment agreement with Dimitris Voliotis in January 2019 whereby Mr. Voliotis agreed to serve as the Chief Development Officer of CureVac. The agreement provides for a base salary, discretionary bonus, equity opportunities and additional allowances. The agreement provides Mr. Voliotis with severance in the event we terminate him for convenience or without cause equal to nine months of his base salary and a pro rata portion of his discretionary bonus. The agreement contains restrictive covenants, including covenants related to confidentiality and proprietary information, and a non-competition and non-solicit of customers and employees for nine months after termination.

We subsequently entered into a separation agreement with Mr. Voliotis in January 2020 under which Mr. Voliotis resigned from his employment and received separation pay equal to nine months of his base salary and his discretionary bonus less half of the signing bonus received in connection with his employment agreement.

Bonus Plan

We maintain and implement a management bonus plan for the members of our management. Under the management bonus plan, we provide a variable bonus payment as a component of management compensation that ranges from 45% to 55% of the individual’s annual base salary, depending on management level. We agree upon the respective individual amount of the target bonus with each employee on an individual contractual basis. The annual performance review is used to measure the achievement of objectives. In the individual’s annual performance review, we measure the achievement of objectives for the past year and define the objectives for the coming year. The calculation of the respective bonus payment is based on the individual degree of target achievement, which is then calculated as a percentage of the annual base salary and is usually paid out in March of the following year. The bonus is calculated on a pro rata basis if the individual joins or leaves CureVac during the year.

Equity Incentive Plans

Certain members of our management receive share-based compensation under the legacy management stock option plan (“Legacy Management Stock Option Plan”) in the form of share option awards. As of May 31, 2020, there were a total of 5,282 option awards outstanding and exercisable under the Legacy Management Stock Option Plan. These options grant the holder the right to purchase series A shares of CureVac AG for a purchase price of €1 per share. All of the outstanding options have vested and will expire on December 31, 2021. These options will be converted into option awards exercisable for common shares of CureVac N.V. on a to basis upon the completion of our corporate reorganization. Following this conversion, subject to the vesting, exercise and expiration terms discussed above, these option awards will be governed by the new equity incentive plan (the “Plan”) that we will establish in connection with the completion of our corporate reorganization.

In addition to the management share option awards described above, we have a virtual share plan for members of the management board and other key employees of CureVac (“Prior VSOP”). As of May 31, 2020, there were 56,749 virtual shares issued and outstanding and 3,426 available for issuance under the Prior VSOP. Each virtual share tracks one underlying series A share of CureVac AG, but the

holders of the virtual shares do not hold a direct interest in CureVac AG. Upon vesting of virtual shares, the holder is able to exchange his or her virtual shares (in whole or in part) for cash or shares of CureVac AG, at the discretion of CureVac, subject to the occurrence of certain predefined events. However, the economic burden of such an exchange under the Prior VSOP will be borne exclusively by those shareholders already invested in CureVac AG as of October 1, 2015. Ten percent (10%) of each award under the Prior VSOP will become exercisable upon expiry of the 180 day lock-up period following the closing of this offering. Following the closing of this offering, the remaining part of each award may be exercised (in whole or in part) upon the occurrence of certain defined triggering events, including, but not limited to, drug approval, or the sale by a majority shareholder of 5% of our outstanding shares, in each case subject to the conditions of the Prior VSOP. The rights under the Prior VSOP will terminate after the expiry of the ninth calendar year after the listing of our common shares on Nasdaq. The Prior VSOP will be restructured upon the completion of our corporate reorganization. Following this restructuring, upon vesting of virtual shares, the holder will be able to exchange his or her virtual shares (in whole or in part) for cash or common shares of CureVac N.V. (instead of shares of CureVac AG) on a _____ to _____ basis.

Due to the increase in value of CureVac, we modified our incentive program to allow members of the management board and other employees to participate in the value-increased business based on CureVac's current valuation and conditional upon the occurrence of certain enumerated exercise cases (including the consummation of this offering) reflecting such value-increase ("New VSOP"). As of May 31, 2020, there were 36,453 virtual shares issued and outstanding and 14,812 virtual shares available for issuance under the New VSOP. Each virtual share tracks one underlying series A share of CureVac AG. The New VSOP provides a cash-claim against CureVac in the amount of the positive difference between the value of CureVac per virtual share at the grant date (as determined by CureVac when the New VSOP was established) and the value per virtual share at the time of exercise of such virtual share (such value to be derived from the valuation of CureVac in the relevant triggering event) and gives CureVac discretion to provide tradable shares against payment of the value of CureVac per virtual share at the grant date. Such awards provided under the New VSOP have a term of ten years from the date of grant and vest over four years, where 25% vest after the first anniversary of the hire date and the remainder vests monthly with vesting on the last day of the month. These virtual shares will be assumed by CureVac N.V. upon the completion of our corporate reorganization. At this time, the virtual shares will be converted into options, exercisable for common shares of CureVac N.V. on a _____ to _____ basis. Following this conversion, subject to the vesting, exercise and expiration terms discussed above, these option awards will be governed by the Plan.

In connection with this offering, we intend to establish the Plan pursuant to which we may grant options, restricted stock, restricted stock units, share appreciation rights and other equity and equity-based awards. The maximum number of common shares underlying awards granted pursuant to the Plan, including the awards granted in connection with the conversion of awards under the Legacy Management Stock Option Plan and the New VSOP, as discussed above, plus the common shares underlying awards under the Prior VSOP following the restructuring of the Prior VSOP as discussed above to the extent such awards have not yet been exercised or settled, will in total not exceed an equivalent of 15% of our issued share capital from time to time. The Plan will be administered by our management board and supervisory board, where appropriate, on the basis of a recommendation of our compensation committee (the body administering the Plan, the "Committee"). Awards under the Plan may be granted to our employees, our managing directors and supervisory directors, consultants or other advisors. Awards under the Plan may be conditioned upon the achievement or satisfaction of performance criteria. The vesting conditions for awards under the Plan will be determined by the Committee and will be set forth in the applicable award documentation. The Plan will provide for special provisions for good leavers and bad leavers as well as for a change in control of our company.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics, or code of conduct, which outlines the principles of legal and ethical business conduct under which we do business. The code of conduct applies to all of our management board and supervisory directors and employees. Upon the closing of this offering, the full text of the code of conduct will be available on our website at www.curevac.com. The information and other content appearing on our website are not part of this prospectus.

In addition, we have implemented a compliance management policy which describes the compliance management system implemented at CureVac AG, which is designed to ensure compliance with all legal requirements, while at the same time implementing high ethical standards that are mandatory for both management and each employee. The overall responsibility for the compliance management system lies with the management board, which reports regularly to the audit committee. In the performance of its compliance responsibilities, the management board has delegated the corresponding tasks to various functions at CureVac AG.

PRINCIPAL SHAREHOLDERS

As of the date of this prospectus, our authorized share capital is € , consisting of common shares, par value €0.12 per share. Each of our common shares entitles its holder to one vote. The following table presents information relating to the beneficial ownership of our common shares as of July 31, 2020 and after giving effect to (i) the consummation of the 2020 Private Investment (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million at a price per share equal to the public offering price in this public offering and (iii) our corporate reorganization by:

- each person, or group of affiliated persons, known by us to own beneficially 5% or more of our outstanding common shares;
- each managing director and supervisory director; and
- all managing directors and supervisory directors as a group.

Subsequent to the pricing of this offering and as the initial step of our corporate reorganization, all of the outstanding shares in CureVac AG will be contributed and transferred to CureVac B.V. in a capital increase in exchange for common shares of CureVac B.V. on a -to- basis. Following the completion of this offering and the corporate reorganization, we will have only one class of shares issued and outstanding, and all outstanding common shares will carry the same voting rights. See “Corporate Reorganization.”

The number of common shares beneficially owned by each entity, person, supervisory director or managing director is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any common shares over which the individual has sole or shared voting power or investment power as well as any common shares that the individual has the right to acquire within 60 days of , 2020 through the exercise of any option, warrant or other right. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all common shares held by that person.

The percentage of outstanding common shares is computed on the basis of common shares outstanding as of July 31, 2020. Common shares that a person has the right to acquire within 60 days of July 31, 2020 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all members of the supervisory board and management board as a group. The percentages do not give effect to any shares that may be acquired by our shareholders, management board members or supervisory board members pursuant to the directed share program or in this offering. Unless otherwise indicated below, the address for each beneficial owner is CureVac AG, Friedrich-Miescher-Strasse 15, 72076 Tübingen, Germany.

Shareholder	Shares beneficially owned prior to the corporate reorganization and the Offering ⁽¹⁾		Common shares beneficially owned after giving effect to the corporate reorganization and the Offering		
	Number	Percentage	No exercise of underwriter's option		Full exercise of underwriter's option
			Number	Percentage	Percentage
5% Shareholders:					
Dievini Hopp BioTech holding GmbH & Co. KG		%		%	%
Mr. Dietmar Hopp		%		%	%
Kreditanstalt für Wiederaufbau ⁽²⁾		%		%	%
Glaxo Group Limited		%		%	%

Shareholder	Shares beneficially owned prior to the corporate reorganization and the Offering ⁽¹⁾		Common shares beneficially owned after giving effect to the corporate reorganization and the Offering		
	Number	Percentage	No exercise of underwriter's option		Full exercise of underwriter's option
			Number	Percentage	Percentage
Managing Directors:					
Florian von der Mülbe, Ph.D., MBA		%		%	%
Mariola Fotin-Mleczek, Ph.D.		%		%	%
Franz-Werner Haas, LL.D., LL.M.		%		%	%
Pierre Kemula, B.Sc.		%		%	%
Supervisory Directors:					
Ralf Clemens, MD, Ph.D.		%		%	%
Mathias Hothum, Ph.D.		%		%	%
Baron Jean Stéphenne, MSc, MBA		%		%	%
Hans Cristoph Tanner, Ph.D.		%		%	%
Friedrich von Bohlen und Halbach, Ph.D.		%		%	%
Timothy M. Wright, MD		%		%	%
Craig A. Tooman, MBA		%		%	%
All Managing Directors and Supervisory Directors as a Group:		%		%	%

* Represents beneficial ownership of less than 1%.

(1) On a pro forma basis to give effect to (i) the consummation of the 2020 Private Investment and (ii) the consummation of the concurrent private placement to Mr. Hopp of €100 million of our common shares at a price per share equal to the public offering price in this public offering.

(2) KfW, or Kreditanstalt für Wiederaufbau, is an institution (*Anstalt des öffentlichen Rechts*) organized under public law of the Federal Republic of Germany. The Federal Republic of Germany holds 80% of KfW's subscribed capital, and the German federal states (Länder) hold the remaining 20%. The address for KfW is Palmengartenstrasse 5-9, 60325 Frankfurt am Main, Germany.

As of _____, 2020, after giving effect to our corporate reorganization, _____ common shares, representing _____ % of our issued and outstanding common shares, were held by _____ U.S. record holders.

Following the completion of this offering and the corporate reorganization, each of our shareholders is entitled to one vote per common share. None of the holders of our shares will have different voting rights from other holders of shares after the closing of this offering. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

RELATED PARTY TRANSACTIONS

The following is a description of related party transactions we have entered into since January 1, 2017 with any of our management and supervisory directors and the holders of more than 5% of our common shares.

dievini Hopp BioTech holding GmbH & Co. KG, Walldorf

Dievini holds the majority of our capital stock and is the controlling shareholder. Molecular Health GmbH (Molecular Health) is a subsidiary of dievini. In December 2017, we concluded a contract with Molecular Health, according to which Molecular Health provides services in conjunction with the Modeling of the biological and clinical effects of Toll-like receptor 7 and 8 agonists in cancer and immune cells. In fiscal years 2017, 2018 and 2019, payments to Molecular Health with respect to research and development amounted to €60,000, €30,000 and €0, respectively.

Convertible Loans with Mr. Hopp

We entered into a convertible loan agreement on May 3, 2019 with Mr. Dietmar Hopp, managing director of dievini, under which Mr. Hopp disbursed to us the amount of €50,000,000 (“Convertible Loan I”). On October 24, 2019, we entered into an additional convertible loan agreement with Mr. Hopp, as amended, under which we have the right to call for disbursements in two tranches of €20,000,000 and a final tranche of €23,926,900, until December 31, 2021 (“Convertible Loan II,” and together with Convertible Loan I, the “Convertible Loans”). The Convertible Loans bear an interest rate of 8.00% per annum. As of March 31, 2020, the outstanding principal amount is €69.9 million. On June 26, 2020, Mr. Hopp disbursed to us an additional \$26.8 million. On July 24, 2020, we terminated the convertible loan agreements. We plan to repay the Convertible Loans prior to the consummation of this offering. See note 12 to our financial statements contained elsewhere in this prospectus for further information on the Convertible Loans.

Rittershaus law firm, Mannheim

A consulting agreement dated December 15, 2005 was in place for an indefinite term with the law firm Rittershaus Rechtsanwälte Partnerschaftsgesellschaft mbB, Mannheim (Rittershaus). The agreement was replaced by a new consulting agreement dated January 1, 2015.

The agreement can be terminated without notice by us and with notice of three months to the end of the quarter by Rittershaus. In fiscal years 2017, 2018 and 2019, consulting fees of €67,500, €144,900 and €208,000 were paid to Rittershaus. Prof. Dr. Christof Hettich, one of the managing directors of dievini is a partner of Rittershaus.

Dr. Ingmar Hörr

From June 2018 until March 2020 an advisory agreement was in place between Dr. Ingmar Hoerr and CureVac. Dr. Hoerr received €144,000 and €240,000 for consulting services in fiscal years 2018 and 2019, respectively.

2020 Private Investment

On July 17, 2020, we entered into a binding agreement with KfW, Glaxo Group Limited, or GSK, QIA and other investors, pursuant to which we agreed to issue new Series B shares in CureVac AG representing approximately 36% of the shares in CureVac AG in exchange for an aggregate investment of approximately €560 million, at a purchase price of €1,336.50 per share.

According to the mandate of KfW by the Federal Republic of Germany pursuant to and in accordance with article 2 paragraph 4 of the KfW Law (*Zuweisungsgeschäft*) KfW, acquired approximately 19% shareholding in CureVac AG for an aggregate investment of approximately €300 million, we refer to the investment of KfW as the KfW Investment and to the investment by GSK as the GSK Investment. In addition, GSK acquired approximately a 9% shareholding in CureVac AG for an investment of approximately €150 million and QIA acquired approximately 4% shareholding in CureVac AG for an investment of approximately €60 million. We refer to the investment of KfW as the KfW Investment and to the investment

by GSK as the GSK Investment. In addition, the other several shareholders purchased an aggregate 3% shareholding in CureVac AG for an aggregate investment of approximately €50 million, at a purchase price of €1,336.50 per share. As part of our corporate reorganization, outstanding shares of all series in CureVac AG will be exchanged for common shares in CureVac B.V. which subsequently will be converted into CureVac N.V. See “Corporate Reorganization.”

As part of the 2020 Private Investment those investors who have subscribed for our Series A, B and C shares, or the pre-IPO shareholders, became parties to an Investment and Shareholders’ Agreement, as amended, pursuant to which certain of our pre-IPO shareholders holding at least 10% of our shares upon consummation of this offering will enter into a Registration Right Agreement, as further described below. In addition, KfW has become a party to a Relationship Agreement and entered into a separate Shareholders’ Agreement with dievini and Mr. Hopp as further described below. As part of the GSK Investment we also agreed to enter into a collaboration agreement with GSK pursuant to which we will collaborate with GSK to research, develop and commercialize prophylactic and therapeutic non-replicating mRNA-based vaccines and antibodies targeting infectious disease pathogens. For further information regarding our collaboration agreement with GSK please refer to “Business — Collaborations.”

We are obligated to use the funds raised in the 2020 Private Investment solely to fund the (i) development of our proprietary pipeline, including earlier stage assets currently in preclinical development, (ii) research and development activities to expand our mRNA platform technology, in particular with respect to our vaccine candidate against SARS-CoV-2 and other infectious diseases and (iii) manufacturing capacities for mRNA-based drug product candidates and future approved products.

Shareholders’ Agreement Among KfW, dievini and Mr. Hopp

In connection with the KfW Investment, KfW, dievini and Mr. Hopp entered into a shareholders’ agreement on June 16, 2020, or the KfW dievini Shareholders’ Agreement, agreeing to certain transfer restrictions and rights of first refusal relating to their interests in our company, nomination rights as provided elsewhere in this prospectus, and a voting agreement relating to certain specified actions. In particular, dievini and Mr. Hopp agree to vote a specified number of their shares as directed by KfW on certain specified actions, subject to certain exceptions. These specified actions include, inter alia: (1) transferring the tax domicile of CureVac N.V. and/or the approval of the transfer of the corporate or administrative seat of CureVacAG; (2) relocating or ceasing activities in specified areas to a state outside the European Union to the extent (in particular in the area of the development of vaccines) material for the protection of the health of the population of the European Union; (3) entering into material mergers and acquisitions; and (4) amendments to the articles of association of CureVac AG which would affect the foregoing matters. Under the terms of KfW dievini Shareholders’ Agreement, Mr. Hopp has agreed to purchase an aggregate of €100 million of our common shares in a concurrent private placement at a price per share equal to the initial public offering price. The KfW dievini Shareholders’ Agreement has an initial fixed term that expires on December 31, 2023, subject to a right to extend for one year for the benefit of KfW and dievini, and may be terminated after the initial fixed term, or the extended term, if applicable, by either party subject to six months’ notice prior the end of the applicable calendar year. In addition, the agreement shall automatically terminate if KfW sells all or a part of its interest in our company to a third party, subject to certain exceptions.

Investment and Shareholders’ Agreement

We and our pre-IPO shareholders, entered into an investment and shareholders’ agreement July 17, 2020, or the ISA. The ISA provides for certain particular shareholders’ rights and also envisages restrictions on the shareholders party thereto, including the obligation to enter into a registration rights agreement, restrictions on transfer, as well as certain tag along rights, drag along rights, demand rights, rights of first offer and rights of first refusal.

Upon the listing of our shares on Nasdaq, only certain limited provisions of the ISA shall survive the corporate reorganization. See “Corporate Reorganization.” Pursuant to such provisions that will survive the IPO we and/or our pre-IPO shareholders will be obligated to certain obligations listed below.

- We agreed to prepare and provide KfW our interim financials not later than 30 days after the end of each quarter. In addition, not later than 30 days prior to the start of each fiscal year we agreed to prepare and provide KfW our operating plans that shall include certain projections regarding our financials, our business plan relating to the succeeding fiscal year including our development plans, financial and investment plans, budgeted and projected figures and other information and forecasts. Our supervisory board will need to approve the planning by a simple majority vote. In addition, subject to certain limitations, the member of our supervisory board designated (*nominiert*) by KfW shall, to the extent not prohibited by any mandatory law and/or Nasdaq rules, be entitled to pass on and discuss any information received in his or her capacity as a member of the supervisory board with KfW and certain governmental agencies and offices of the federal government of the federal republic of Germany, however, restricted to the extent required for KfW and any of the aforementioned institutions to comply with their respective obligations. We are obligated to also provide to KfW upon its request such information that is reasonably requested by KfW for the management and the controlling of KfW's shareholding in us in order for KfW and certain other institutions as of the Federal Republic of Germany to comply with their respective obligations;
- KfW has the right to designate (*nominieren*) one member of our supervisory board for appointment by the general meeting (and to prompt the recall of such member of the supervisory board at its sole discretion) as long as KfW's shareholding in our share capital is at least 10% in accordance with the arrangements included in our articles of association. Furthermore, our pre-IPO shareholders shall, to the extent legally permissible, ensure that any established advisory board or any other comparable panel of our subsidiaries or affiliate shall also provide KfW the right, upon its discretion, to include a member to be designated (*nominieren*);
- We will need to reasonably cooperate with each of our pre-IPO shareholders to provide them with information that is mandatory for their tax obligations;
- If we fail to withhold taxes on certain amounts paid to a pre-IPO shareholder, its affiliates and certain related persons of such pre-IPO shareholder (excluding a shareholder that was not our shareholder prior to the 2020 Private Investment), and such certain amounts are reimbursable or creditable to such pre-IPO shareholder, its affiliates and certain related persons of such pre-IPO shareholder, then such pre-IPO shareholder will need to use his or her best efforts in order to obtain a credit or reimbursement from the applicable tax authority and such credit or reimbursement shall be paid to us;
- We are obligated to use the funds raised in the 2020 Private Investment solely to fund the (i) development of our proprietary pipeline, including earlier stage assets currently in preclinical development, (ii) research and development activities to expand our mRNA platform technology, in particular with respect to our vaccine candidate against SARS-CoV-2 and other infectious diseases and (iii) manufacturing capacities for mRNA-based drug product candidates and future approved products;
- We entered into a Global Access Agreement with the Bill & Melinda Gates Foundation in February 2015 pursuant to which we are required to take certain actions to support the Bill & Melinda Gates Foundation's mission. We may be required to redeem all, or to facilitate the purchase by a third party of all, the shares held in us by the Bill & Melinda Gates Foundation as per the date of the ISA on certain terms that may not be favorable to us, if we receive from the Bill & Melinda Gates Foundation a notification that we have (a) committed a material breach of certain commitments under the Global Access Agreement (b) used the funds received from the Bill & Melinda Gates Foundation for purposes other than those described in the Global Access Agreement, including not for the (i) finance of our facility to be used inter alia to manufacture vaccines and drugs in support of the Bill & Melinda Gates Foundation's charitable purpose, (ii) continued development of technology for prophylactic and therapeutic mRNA vaccines and drugs against infectious diseases and vaccine adjuvants, comprised of long, non-coding RNA molecules and formulation/delivery technology necessary to develop the mRNA vaccines and drugs, or the Platform Technology, (iii) the use of the Platform Technology to advance vaccine and drug candidates in support of the Bill & Melinda Gates Foundation charitable purpose and/or

(c) failed to comply with certain U.S. regulatory and tax obligations, or together the BMGF Default, and the BMGF Default continues to exist following a cure period. In addition, if we are required but fail to purchase all of the shares held in us by the Bill & Melinda Gates Foundation as per the date of the ISA, we shall not be allowed to pay dividends, redeem the shares of any other shareholder (other than repurchases at cost of shares from our employees, officers, directors, consultants or other persons performing services for us pursuant to agreements under which we have the option to repurchase our shares upon the occurrence of the termination of employment or service) or otherwise make any other distribution to any of our shareholders in connection with their shares. In addition, if within 12 months after such redemption or sale, we close an underwritten public financing or a change of control occurs and the valuation used for such underwritten public financing or a change of control, as the case may be, is in excess of 200% of the valuation used for the redemption or the sale of the shares held by the Bill & Melinda Gates Foundation, we will need to pay the Bill & Melinda Gates Foundation compensation equal to the excess of what it would have received in such transaction if it still held its shares at the time of such underwritten public financing or a change of control over what it received in the sale or redemption of its shares had the BMGF Default not occurred. For further information regarding the Global Access Agreement see “Bill & Melinda Gates Foundation Partnership;”

- Upon consummation of this offering we agreed to file an application for continuation of tax book value (*Antrag auf Buchwertfortführung* acc. to Sec. 21 par. 1 second and third sentences German Tax Conversion Act — *UmwStG*) regarding the shares of CureVac AG to be transferred as set out above with the respectively competent tax authorities within four (4) months after the date of the ISA at the latest;
- Following the consummation of this offering, we agreed to provide pre-IPO shareholders holding at least 10% of our share capital certain information required to facilitate the disposition of our shares held by any such pre-IPO shareholder, or in some circumstances to provide information that we intend to file with the SEC and in such case we may be required to take into account the input of such pre-IPO shareholder holding prior to the filing with the SEC. In addition, we agreed that upon a written request of such a pre-IPO shareholder, we will add such pre-IPO shareholder holding to our liability insurance as a named insured in connection with the consummation of this offering, but any related premium shall be borne by such pre-IPO shareholder holding at least 10% of our share capital; and
- dievini and certain other limited pre-IPO shareholders agreed to bear the economics with respect to the Prior VSOP for a total of up to 60,175 participation rights corresponding with 10% of our share capital as of February 1, 2015 in the amount of altogether EUR 601,750. In case of an exercise event under the Prior VSOP dievini and such other limited pre-IPO shareholders agreed to transfer common shares up to a pre-determined amount to allow us to fulfil any claims of the beneficiaries under the Prior VSOP.

Registration Rights Agreement

Effective upon consummation of this offering, certain of our shareholders will be provided with unlimited piggyback and certain demand registration rights subject to customary limitations and restrictions. See “Shares Eligible for Future Sale — Registration Rights.”

Relationship Agreement

In connection with the KfW Investment, KfW, dievini and CureVac B.V. entered into a relationship agreement on July 17, 2020, or the KfW dievini Relationship Agreement. Pursuant the KfW dievini Relationship Agreement the parties provide for our agreed form of the articles of association, the supervisory board rules and the management board rules, the forms of which are all filed as an exhibits to the registration statement of which this prospectus forms a part. In addition, the KfW dievini Relationship Agreement establishes that if at any time during the effectiveness of the KfW dievini Shareholders’ Agreement any of our shareholders other than KfW or dievini is granted a nomination right to our supervisory board or the supervisory board of any of our subsidiaries, then all of the parties to the KfW dievini Relationship Agreement shall use best efforts to exercise their shareholder rights to ensure that KfW and dievini shall each be given

a nomination right as well. We also agreed not to procure, not to propose or implement during the terms of the KfW dievini Shareholders' Agreement and the ISA, any amendment to the corporate documents of CureVac AG or CurVac B.V. or Curevac N.V., which would violate or not observe the Relationship Agreement, the ISA or other agreements concluded with us and KfW in connection with KfW's investment.

Indemnification Agreements

Our articles of association, as they will be effective upon closing of the offering, will require us to indemnify our current and former managing directors and supervisory directors to the fullest extent permitted by law, subject to certain exceptions. We intend to enter into indemnification agreements with all our managing directors and supervisory directors, effective upon the closing of this offering.

Employment Agreements

Certain of our managing directors and supervisory directors have entered into service agreements with us as discussed in more detail within the "Management Board Service Contracts" and "Supervisory Board Service Contracts" sections above.

Directed Share Program

At our request, the underwriters have reserved up to common shares, or % of common shares to be offered by this prospectus for sale, at the initial public offering price, through a directed share program.

DESCRIPTION OF SHARE CAPITAL AND ARTICLES OF ASSOCIATION

We were incorporated pursuant to the laws of the Netherlands as CureVac B.V. on April 7, 2020 to become a holding company for CureVac AG prior to the closing of this offering. Pursuant to the terms of a corporate reorganization that will be completed prior to the closing of this offering, all of the outstanding shares in CureVac AG will be contributed and transferred to CureVac B.V. in a capital increase in exchange for common shares of CureVac B.V. and, as a result, CureVac AG will become a wholly owned subsidiary of CureVac B.V. and the current shareholders of CureVac AG will become the shareholders of CureVac B.V. Immediately following such exchange, and prior to the listing of our common shares on Nasdaq, we intend to convert into a public company (*naamloze vennootschap*) under Dutch law pursuant to a Dutch notarial deed of amendment and conversion, following which our legal name will be CureVac N.V. As part of our corporate reorganization, outstanding shares of all series in CureVac AG will be exchanged for common shares in CureVac N.V. See “Corporate Reorganization.” Our affairs are governed by the provisions of our articles of association and internal rules, regulations and policies, as amended and restated from time to time, and by the provisions of applicable Dutch law.

As provided in our articles of association, subject to Dutch law, we have full capacity to carry on or undertake any business or activity as a holding company, do any act or enter into any transaction consistent with the objects specified in our articles of association, and, for such purposes, full rights, powers and privileges. Our registered office is Friedrich-Miescher-Strasse 15, 72076, Tübingen, Germany.

As of the execution of our deed of conversion and amendment as part of the corporate reorganization (see “Corporate Reorganization”), our authorized share capital will amount to € , divided into common shares and preferred shares, each with a nominal value of €0.12, and our issued share capital will amount to € . Upon the closing of this offering, our issued share capital will amount to € . We have applied to list our common shares on Nasdaq under the symbol “CVAC.”

Initial settlement of our common shares will take place on the closing date of this offering through The Depository Trust Company, or DTC, in accordance with its customary settlement procedures for equity securities. Each person owning common shares held through DTC must rely on the procedures thereof and on institutions that have accounts therewith to exercise any rights of a holder of the common shares. Persons wishing to obtain certificates for their common shares must make arrangements with DTC.

The following is a summary of relevant information concerning our share capital and our articles of association as they will read upon the closing of this offering. This summary does not constitute legal advice regarding those matters and should not be regarded as such.

Common Shares

The following summarizes the main rights of holders of our common shares:

- each holder of common shares is entitled to one vote per share on all matters to be voted on by shareholders generally, including the appointment of managing directors and supervisory directors;
- there are no cumulative voting rights;
- the holders of our common shares are entitled to dividends and other distributions as may be declared from time to time by us out of funds legally available for that purpose, if any, following payment of the preferred dividend if any preferred shares are outstanding;
- upon our liquidation, dissolution or winding-up, the holders of common shares will be entitled to share ratably in the distribution of all of our assets remaining available for distribution after satisfaction of all our liabilities, following payment of the preferred dividend if any preferred shares are outstanding; and
- the holders of common shares have preemptive rights in case of share issuances or the grant or rights to subscribe for shares, except if such rights are limited or excluded by the corporate body authorized to do so and except in such cases as provided by Dutch law and our articles of association.

Shareholders' Register

Pursuant to Dutch law and our articles of association, we must keep our shareholders' register accurate and current. The management board keeps our shareholders' register and records names and addresses of all holders of shares, showing the date on which the shares were acquired, the date of the acknowledgement by or notification of us as well as the amount paid on each share. The register also includes the names and addresses of those with a right of use and enjoyment (*vruchtgebruik*) in shares belonging to another or a pledge (*pandrecht*) in respect of such shares. The common shares offered in this offering will be held through DTC, therefore DTC or its nominee will be recorded in the shareholders' register as the holder of those common shares. The shares are in registered form (*op naam*). We may issue share certificates (*aandeelbewijzen*) for registered shares in such form as may be approved by our management board.

Corporate Objectives

Pursuant to our articles of association, our main corporate objectives are:

- to incorporate, to participate in, to finance, to hold any other interest in and to conduct the management or supervision of other entities, companies and partnerships in the area of pharmaceuticals and related products;
- to acquire, to manage, to invest, to exploit, to encumber and to dispose of assets and liabilities;
- to furnish guarantees, to provide security, to warrant performance in any other way and to assume liability, whether jointly and severally or otherwise, in respect of obligations of group companies or other parties; and
- to do anything which, in the widest sense, is connected with or may be conducive to the objects described above.

Limitations on the Rights to Own Securities

Our common shares may be issued to individuals, corporations, trusts, estates of deceased individuals, partnerships and unincorporated associations of persons. Our articles of association contain no limitation on the rights to own our common shares and no limitation on the rights of nonresidents of the Netherlands or foreign shareholders to hold or exercise voting rights. Our preferred shares shall only be issued to the protective foundation, if and when incorporated.

Limitation on Liability and Indemnification Matters

Under Dutch law, managing directors and supervisory directors may be held liable for damages in the event of improper or negligent performance of their duties. They may be held jointly and severally liable for damages to the company and to third parties for infringement of the articles of association or of certain provisions of Dutch law. In certain circumstances, they may also incur additional specific civil and criminal liabilities. Subject to certain exceptions, our articles of association provide for indemnification of our current and former managing directors and supervisory directors (and other current and former officers and employees as designated by our management board, subject to approval by our supervisory board). No indemnification shall be given to an indemnified person:

- (a) if a competent court or arbitral tribunal has established, without having (or no longer having) the possibility for appeal, that the acts or omissions of such indemnified person that led to the financial losses, damages, expenses, suit, claim, action or legal proceedings as described above are of an unlawful nature (including acts or omissions which are considered to constitute malice, gross negligence, intentional recklessness and/or serious culpability attributable to such indemnified person);
- (b) to the extent that his or her financial losses, damages and expenses are covered under insurance and the relevant insurer has settled, or has provided reimbursement for, these financial losses, damages and expenses (or has irrevocably undertaken to do so);
- (c) in relation to proceedings brought by such indemnified person against the company, except for proceedings brought to enforce indemnification to which he is entitled pursuant to

our articles of association, pursuant to an agreement between such indemnified person and the company which has been approved by the management board or pursuant to insurance taken out by the company for the benefit of such indemnified person; and

- (d) for any financial losses, damages or expenses incurred in connection with a settlement of any proceedings effected without the company's prior consent.

Under our articles of association, our management board may stipulate additional terms, conditions and restrictions in relation to the indemnification described above.

Shareholders' Meetings

General meetings may be held in Amsterdam, Arnhem, Assen, The Hague, Haarlem, Hertogenbosch, Groningen, Leeuwarden, Lelystad, Maastricht, Middelburg, Rotterdam, Schiphol (Haarlemmermeer), Utrecht or Zwolle, all in the Netherlands. The annual general meeting must be held within six months of the end of each financial year. Additional extraordinary general meetings may also be held, whenever considered appropriate by the management board or the supervisory board and shall be held within three months after our management board has considered it to be likely that our equity has decreased to an amount equal to or lower than half of its paid-in and called up share capital, in order to discuss the measures to be taken if so required.

Pursuant to Dutch law, one or more shareholders or others with meeting rights under Dutch law who jointly represent at least one-tenth of the issued share capital may request us to convene a general meeting, setting out in detail the matters to be discussed. If we have not taken the steps necessary to ensure that such meeting can be held within six weeks after the request, the requesting party/parties may, on their application, be authorized by the competent Dutch court in preliminary relief proceedings to convene a general meeting. The court shall disallow the application if it does not appear that the applicants have previously requested our management board and our supervisory board to convene a general meeting and neither our management board nor our supervisory board has taken the necessary steps so that the general meeting could be held within six weeks after the request.

General meetings must be convened by an announcement published in a Dutch daily newspaper with national distribution. The notice must state the agenda, the time and place of the meeting, the record date (if any), the procedure for participating in the general meeting by proxy, as well as other information as required by Dutch law. The notice must be given at least 15 days prior to the day of the meeting. The agenda for the annual general meeting shall include, among other things, the adoption of the annual accounts, appropriation of our profits and proposals relating to the composition of the management board and supervisory board, including the filling of any vacancies in such bodies. In addition, the agenda shall include such items as have been included therein by the management board or the supervisory board. The agenda shall also include such items requested by one or more shareholders, or others with meeting rights under Dutch law, representing at least 3% of the issued share capital. Requests must be made in writing or by electronic means and received by us at least 60 days before the day of the meeting. No resolutions shall be adopted on items other than those that have been included in the agenda.

In accordance with the DCGC and our articles of association, shareholders having the right to put an item on the agenda under the rules described above shall exercise such right only after consulting the management board in that respect. If one or more shareholders intend to request that an item be put on the agenda that may result in a change in the company's strategy (for example, the removal of managing directors or supervisory directors), the management board must be given the opportunity to invoke a reasonable period to respond to such intention. Such period shall not exceed 180 days (or such other period as may be stipulated for such purpose by Dutch law and/or the DCGC from time to time). If invoked, the management board must use such response period for further deliberation and constructive consultation, in any event with the shareholders(s) concerned, and shall explore the alternatives. At the end of the response time, the management board shall report on this consultation and the exploration of alternatives to the general meeting. This shall be supervised by our supervisory board. The response period may be invoked only once for any given general meeting and shall not apply: (a) in respect of a matter for which a response period has been previously invoked; or (b) if a shareholder holds at least 75% of the company's issued share

capital as a consequence of a successful public bid. The response period may also be invoked in response to shareholders or others with meeting rights under Dutch law requesting that a general meeting be convened, as described above.

The general meeting is presided over by the chairman of the supervisory board. If no chairman has been elected or if he or she is not present at the meeting, the general meeting shall be presided over by the vice-chairman of the supervisory board. If no vice-chairman has been elected or if he or she is not present at the meeting, the general meeting shall be presided over by another supervisory director present at the meeting. If no supervisory director is present, the meeting shall be presided over by our CEO. If no CEO has been elected or if he or she is not present at the meeting, the general meeting shall be presided over by another managing director present at the meeting. If no managing director is present at the meeting, the general meeting shall be presided over by any other person appointed by the general meeting. In each case, the person who should chair the general meeting pursuant to the rules described above may appoint another person to chair the general meeting instead. Managing directors and supervisory directors may always attend a general meeting. In these meetings, they have an advisory vote. The chairman of the meeting may decide at his or her discretion to admit other persons to the meeting.

All shareholders and others with meeting rights under Dutch law are authorized to attend the general meeting, to address the meeting and, in so far as they have such right, to vote pro rata to his or her shareholding. Shareholders may exercise these rights, if they are the holders of shares on the record date, if any, as required by Dutch law, which is currently the 28th day before the day of the general meeting. Under our articles of association, shareholders and others with meeting rights under Dutch law must notify us in writing or by electronic means of their identity and intention to attend the general meeting. This notice must be received by us ultimately on the seventh day prior to the general meeting, unless indicated otherwise when such meeting is convened.

Each common share and each preferred share confers the right on the holder to cast one vote at the general meeting. Shareholders may vote by proxy. No votes may be cast at a general meeting on shares held by us or our subsidiaries or on shares for which we or our subsidiaries hold depository receipts. Nonetheless, the holders of a right of use and enjoyment (*vruchtgebruik*) and the holders of a right of pledge (*pandrecht*) in respect of shares held by us or our subsidiaries in our share capital are not excluded from the right to vote on such shares, if the right of use and enjoyment (*vruchtgebruik*) or the right of pledge (*pandrecht*) was granted prior to the time such shares were acquired by us or any of our subsidiaries. Neither we nor any of our subsidiaries may cast votes in respect of a share on which we or such subsidiary holds a right of use and enjoyment (*vruchtgebruik*) or a right of pledge (*pandrecht*). Shares which are not entitled to voting rights pursuant to the preceding sentences will not be taken into account for the purpose of determining the number of shareholders that vote and that are present or represented, or the amount of the share capital that is provided or that is represented at a general meeting.

Decisions of the general meeting are taken by a simple majority of votes cast, except where Dutch law or our articles of association provide for a qualified majority or unanimity.

Managing Directors and Supervisory Directors

Appointment of Managing Directors and Supervisory Directors

Under our articles of association, the managing directors and supervisory directors are appointed by the general meeting upon binding nomination by our supervisory board. During the periods specified below, dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement), KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement), and any other shareholder or group of shareholders owning at least 20% of our issued share capital, or nomination concert, have the right to make a binding nomination for one or more supervisory directors as specified below:

- during the initial nomination period for dievini, dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) will have the right under our articles of association to make a binding nomination for the following number of supervisory directors:
 - four (4) supervisory directors for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by

- our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 70% of our issued share capital;
- three (3) supervisory directors for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 50% (but less than 70%) of our issued share capital;
- two (2) supervisory directors for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 30% (but less than 50%) of our issued share capital; and
- one (1) supervisory director for as long as dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 10% (but less than 30%) of our issued share capital;
- during the initial nomination period for KfW, KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) will have the right under our articles of association to make a binding nomination for one supervisory director; and
- at any time, each nomination concert (excluding dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement), its affiliates and its ultimate beneficiaries and excluding KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates for as long as dievini and KfW, respectively, have the nomination rights discussed above) will have the right under our articles of association to make a binding nomination for one supervisory director for each 20% of our issued share capital represented by that nomination concert, provided such nominee is independent from the nomination concert and CureVac N.V. under the DCGC and applicable U.S. securities laws and Nasdaq rules.

If a supervisory director who was nominated by dievini, KfW or a nomination concert ceases to be a supervisory director before the expiry of his or her term of appointment, dievini, KfW or the relevant nomination concert, as applicable, shall as soon as reasonably possible nominate a successor (if, at that time, dievini, KfW or the nomination concert, as applicable, still has nomination rights under our articles of association at that time) and our supervisory board shall subsequently and promptly convene our general meeting for purposes of appointing such nominee to the supervisory board.

The general meeting may at all times overrule the binding nomination by a resolution adopted by a simple majority of the votes cast, provided such majority represents at least one-third of the issued share capital. If the general meeting overrules the binding nature of a binding nomination, a new nomination shall be prepared by whoever made the overruled nomination.

If dievini, KfW and/or a nomination concert loses the right to nominate one or more of our supervisory directors, as applicable, the supervisory director(s) so nominated must promptly resign. A supervisory director nominated by a nomination concert must also promptly resign once that supervisory director is no longer independent from the nomination concert or our company.

Prior to the closing of this offering, our supervisory board shall adopt a diversity policy for the composition of our management board and our supervisory board, as well as a profile for the composition of the supervisory board. The supervisory board shall make any nomination for the appointment of a managing director or supervisory director with due regard to the rules and principles set forth in such diversity policy and profile, as applicable.

At a general meeting, a resolution to appoint a managing director or supervisory director can only be passed in respect of candidates whose names are stated for that purpose in the agenda of that general meeting or in the explanatory notes thereto.

Under Dutch law, when nominating a person for appointment or reappointment as a supervisory director, the nomination must be supported by reasons (if it concerns a reappointment, past performance must be taken into consideration) and the following information about such person must be provided: (i) age and profession; (ii) the aggregate nominal value of the shares held in the company's capital; (iii) present and past positions, to the extent relevant for the performance of the tasks of a supervisory director; and (iv) the name of each entity where such person already holds a position as supervisory director or non-executive director (in case of multiple entities within the same group, the name of the group shall suffice).

Duties and Liabilities of Managing Directors and Supervisory Directors

Under Dutch law, the management board is charged with the management of the company, subject to the restrictions contained in our articles of association, and the supervisory board is charged with the supervision of the policy of the management board and the general course of affairs of the company and of the business connected with it. The managing directors may divide their tasks among themselves in or pursuant to the internal rules applicable to the management board. Each managing director and supervisory director has a statutory duty to act in the corporate interest of the company and its business. Under Dutch law, the corporate interest extends to the interests of all corporate stakeholders, such as shareholders, creditors, employees, customers and suppliers. The duty to act in the corporate interest of the company also applies in the event of a proposed sale or break-up of the company, provided that the circumstances generally dictate how such duty is to be applied and how the respective interests of various groups of stakeholders should be weighed. The supervisory board will also observe the corporate social responsibility issues that are relevant to us. Any resolution of the management board regarding a material change in our identity or character requires approval of the general meeting. In addition, for the duration of the initial approval period, the following additional resolutions of the management board will require approval of the general meeting and our supervisory board:

- transferring the tax domicile of CureVac N.V. and/or the approval of the transfer of the corporate or administrative seat of CureVac AG;
- relocating or ceasing (including by way of disposal, demerger or similar transactions) activities in specified areas in or to a state outside the European Union, except to the extent our supervisory board considers such activities (in particular in the area of the development of vaccines) not to be material for the protection of the health of the population of the European Union;
- entering into mergers, demergers and similar reorganizations and entering into acquisitions of businesses or participations, except to the extent our supervisory board considers such transactions not to be material;
- amendments to the articles of association of CureVac AG which would affect these approval rights during the initial approval period; and
- the exercise of voting rights in CureVac AG approving, directing or causing any of the foregoing matters.

Our management board is entitled to represent the company. The power to represent the company also vests in the chief executive officer individually, as well as in any other two managing directors acting jointly.

Dividends and Other Distributions

Dividends

We may only make distributions, whether a distribution of profits or of freely distributable reserves, to our shareholders to the extent our shareholders' equity (*eigen vermogen*) exceeds the sum of the paid-in and called-up share capital plus any reserves required by Dutch law or by our articles of association. Under our articles of association, our management board with the approval of our supervisory board may decide that all or part of the profits are carried to reserves. Before reservation of any profit, to the extent that preferred shares have been cancelled and preferred distributions on those cancelled shares are outstanding, the profits are first to be used to satisfy the outstanding claim to those who held those preferred shares at the

moment of such cancellation becoming effective and subsequently if any preferred shares are outstanding, the preferred dividend is paid out on those preferred shares in accordance with our articles of association. The remaining profit will be at the disposal of the general meeting at the proposal of the management board for distribution on the common shares, subject to restrictions of Dutch law and approval by our supervisory board of such proposal of our management board.

We only make a distribution of dividends to our shareholders after the adoption of our annual accounts demonstrating that such distribution is legally permitted. The management board is permitted, subject to certain requirements, to declare interim dividends without the approval of the general meeting, but only with the approval of the supervisory board.

Dividends and other distributions shall be made payable not later than the date determined by the management board. Claims to dividends and other distributions not made within five years from the date that such dividends or distributions became payable will lapse and any such amounts will be considered to have been forfeited to us (*verjaring*).

Exchange Controls

Under Dutch law, there are no exchange controls applicable to the transfer to persons outside of the Netherlands of dividends or other distributions with respect to, or of the proceeds from the sale of, shares of a Dutch company, subject to applicable restrictions under sanctions and measures, including those concerning export control, pursuant to European Union regulations, the Sanctions Act 1977 (*Sanctiewet 1977*) or other legislation, applicable anti-boycott regulations and similar rules. There are no special restrictions in the articles of association or Dutch law that limit the right of shareholders who are not citizens or residents of the Netherlands to hold or vote shares.

Squeeze-Out Procedures

Pursuant to Section 2:92a of the Dutch Civil Code, a shareholder who holds at least 95% of our issued share capital for his or her own account, alone or together with group companies, may initiate proceedings against the other shareholders jointly for the transfer of their shares to such shareholder. The proceedings are held before the Enterprise Chamber of the Amsterdam Court of Appeal, or the Enterprise Chamber (*Ondernemingskamer*), and can be instituted by means of a writ of summons served upon each of the other shareholders in accordance with the provisions of the Dutch Code of Civil Procedure (*Wetboek van Burgerlijke Rechtsvordering*). The Enterprise Chamber may grant the claim for squeeze-out in relation to the other shareholders and will determine the price to be paid for the shares, if necessary, after appointment of one or three experts who will offer an opinion to the Enterprise Chamber on the value to be paid for the shares of the other shareholders. Once the order to transfer becomes final before the Enterprise Chamber, the person acquiring the shares shall give written notice of the date and place of payment and the price to the holders of the shares to be acquired whose addresses are known to him. Unless the addresses of all of them are known to the acquiring person, such person is required to publish the same in a daily newspaper with a national circulation.

Dissolution and Liquidation

Under our articles of association, we may be dissolved by a resolution of the general meeting, subject to a proposal of the management board approved by our supervisory board. In the event of a dissolution, the liquidation shall be effected by the management board, under supervision of our supervisory board, unless the general meeting decides otherwise. During liquidation, the provisions of our articles of association will remain in force as far as possible. To the extent that any assets remain after payment of all debts, if any preferred shares are outstanding, the preferred dividend is first paid out on those preferred shares in accordance with our articles of association. Any remaining assets shall be distributed to the holders of common shares in proportion of their number of shares.

Dutch Corporate Governance Code

As a listed Dutch public company (*naamloze vennootschap*), we will be subject to the DCGC. The DCGC contains both principles and best practice provisions on corporate governance that regulate

relations between the management board, the supervisory board and the general meeting and matters in respect of financial reporting, auditors, disclosure, compliance and enforcement standards. The DCGC is based on a “comply or explain” principle. Accordingly, companies are required to disclose in their statutory annual reports, filed in the Netherlands, whether they comply with the provisions of the DCGC. If they do not comply with these provisions (for example, because of a conflicting Nasdaq requirement), the company is required to give the reasons for such noncompliance. See “Risk factors — we are not obligated to, and do not, comply with all best practice provisions of the Dutch Corporate Governance Code.”

We do not comply with all principles and best practice provisions of the DCGC. As of the date of this prospectus, we deviate from the DCGC as summarized below, but cannot exclude the possibility of deviating from additional provisions of the DCGC, including after the date hereof in order to follow market practice or governance practices in the United States.

Under our articles of association, managing directors and supervisory directors can only be dismissed by the general meeting by simple majority, if the supervisory board or, with respect to supervisory directors nominated by dievini or KfW, by dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders’ Agreement) during the nomination period for dievini or by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders’ Agreement) during the nomination period for KfW, respectively, proposes the dismissal. In other cases, the general meeting can only pass such resolution by a two-thirds majority representing at least half of the issued share capital. The DCGC recommends that the general meeting can pass a resolution to dismiss a managing director or supervisory director by simple majority, representing no more than one-third of the issued share capital.

The DCGC recommends that, for each shareholder or group of affiliated shareholders, who directly or indirectly hold more than ten percent of our issued share capital, there should be no more than one member of our supervisory board who is affiliated with that shareholder or group of shareholders. During the initial nomination period, dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders’ Agreement) will have the right under our articles of association to make a binding nomination for one or more supervisory directors, depending on its shareholding at that time (see above under “Appointment of Managing Directors and Supervisory Directors”) who may be affiliated with dievini. As of the date of this prospectus, two members of our supervisory board are affiliated with dievini.

The DCGC recommends that more than half of the members of our compensation committee and our nomination and corporate governance committee be independent within the meaning of the DCGC. As of the date of this prospectus, exactly half of the members of those committees are independent within the meaning of the DCGC (see “Management — Committees”).

The DCGC recommends against providing equity awards as part of the compensation of a supervisory director. However, we expect to deviate from this recommendation and grant equity awards to our supervisory directors, consistent with U.S. market practice.

Our Plan allows us to set the terms and conditions of equity awards granted thereunder. Under the Plan, we may grant common shares that are not subject to a lock-up period of at least five years after the date of grant, and we may grant options without restricting the exercisability of those options during the first three years after the date of grant. In those cases, this would cause additional deviations from the DCGC.

Dutch Financial Reporting Supervision Act

On the basis of the Dutch Financial Reporting Supervision Act (*Wet toezicht financiële verslaggeving*), or the FRSA, the Dutch Authority for the Financial Markets (*Stichting Autoriteit Financiële Markten*), or AFM, supervises the application of financial reporting standards by Dutch companies whose securities are listed on a Dutch or foreign stock exchange.

Pursuant to the FRSA, the AFM has an independent right to (i) request an explanation from us regarding our application of the applicable financial reporting standards if, based on publicly known facts or circumstances, it has reason to doubt that the company’s financial reporting meets such standards and (ii) recommend to us the making available of further explanations. If we do not comply with such a request or recommendation, the AFM may request that the Enterprise Chamber of the Amsterdam Court of Appeal (*Ondernemingskamer*) order us to (i) make available further explanations as recommended by the AFM, (ii) provide an explanation of the way we have applied the applicable financial reporting standards to our financial reports or (iii) prepare or restate our financial reports in accordance with the Enterprise Chamber’s orders.

Foreign Investment Legislation

Under existing laws of the Netherlands, there are no exchange controls applicable to the transfer to persons outside of the Netherlands of dividends or other distributions with respect to, or of the proceeds from the sale of, shares of a Dutch company, subject to applicable restrictions under sanctions and measures, including those concerning export control, pursuant to European Union regulations, the Sanctions Act 1977 (*Sanctiewet 1977*) or other legislation, applicable anti-boycott regulations and similar rules. There are no special restrictions in the articles of association or Dutch law that limit the right of shareholders who are not citizens or residents of the Netherlands to hold or vote shares.

Listing

We have applied to list the common shares on Nasdaq under the symbol “CVAC.”

Transfer Agent and Registrar

Upon the closing of this offering, the transfer agent and registrar for the common shares will be American Stock and Transfer Company.

COMPARISON OF DUTCH CORPORATE LAW AND U.S. CORPORATE LAW

The following comparison between Dutch corporate law, which applies to us, and Delaware corporation law, the law under which many publicly listed corporations in the United States are incorporated, discusses additional matters not otherwise described in this prospectus. Although we believe this summary is materially accurate, the summary is subject to Dutch law, including Book 2 of the Dutch Civil Code and the DCGC and Delaware corporation law, including the Delaware General Corporation Law.

Corporate Governance

Duties of Managing and Supervisory Directors

The Netherlands. In the Netherlands, a listed company typically has a two-tier board structure with a management board comprised of the managing directors (executive directors) and a supervisory board comprised of the supervisory directors (non-executive directors). We have a two-tier board structure consisting of our management board (*bestuur*) and a separate supervisory board (*raad van commissarissen*).

Under Dutch law, the management board is charged with the management of the company, subject to the restrictions contained in our articles of association, and the supervisory board is charged with the supervision of the policy of the management board and the general course of affairs of the company and of the business connected with it. The managing directors may divide their tasks among themselves in or pursuant to the internal rules applicable to the management board. Each managing director and supervisory director has a statutory duty to act in the corporate interest of the company and its business. Under Dutch law, the corporate interest extends to the interests of all corporate stakeholders, such as shareholders, creditors, employees, customers and suppliers. The duty to act in the corporate interest of the company also applies in the event of a proposed sale or break-up of the company, provided that the circumstances generally dictate how such duty is to be applied and how the respective interests of various groups of stakeholders should be weighed. Any resolution of the management board regarding a material change in our identity or character requires approval of the general meeting. In addition, during the initial approval period, the following additional resolutions of the management board will require approval of the general meeting and our supervisory board:

- transferring the tax domicile of CureVac N.V. and/or the approval of the transfer of the corporate or administrative seat of CureVac AG;
- relocating or ceasing (including by way of disposal, demerger or similar transactions) activities in specified areas in or to a state outside the European Union, except to the extent our supervisory board considers such activities (in particular in the area of the development of vaccines) not to be material for the protection of the health of the population of the European Union;
- entering into mergers, demergers and similar reorganizations and entering into acquisitions or businesses or participations, except to the extent our supervisory board considers such transactions not to be material;
- amendments to the articles of association of CureVac AG which would affect these approval rights during the initial approval period; and
- the exercise of voting rights in CureVac AG approving, directing or causing any of the foregoing matters.

Under our articles of association, the approval of our supervisory board is also required for resolutions of the management board, including concerning the following matters:

- the making of certain proposals to the general meeting;
- the issue of shares or the granting of rights to subscribe for shares;
- the limitation or exclusion of pre-emption rights;
- the establishment of new activities of us or our direct or indirect subsidiaries in the areas of research, development, production and administration and/or the approval to establish activities of CureVac AG or its subsidiaries in these areas, in each case in a state outside the European Union;

- the acquisition of shares by us in our own capital;
- the drawing up or amendment of our management board rules;
- the performance of legal acts relating to non-cash contributions on shares;
- material changes to the identity or the character of the company or its business;
- the charging of amounts to be paid up on shares against the company's reserves;
- the making of an interim distribution;
- designating a current or former officer or employee as indemnitees under our articles of association;
- the stipulation of additional terms, conditions and restrictions in relation to the indemnification offered under our articles of association; and
- and such other resolutions as the supervisory board shall have specified in a resolution to that effect and notified to the management board.

Under the internal rules applicable to our management board, certain additional resolutions are subject to the approval of our supervisory board.

Under the internal rules applicable to our supervisory board, resolutions of our supervisory board to approve a resolution of our management board to exclude or limit pre-emption rights (except in connection with the ordinary operation of our equity incentive plans) or to issue shares against non-cash contribution, shall require the approval of a special committee consisting of one supervisory director nominated by dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for dievini), the supervisory director nominated by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for KfW) and, if applicable, one supervisory director nominated by a nomination concert. In this special committee, the affirmative votes of one supervisory director nominated by dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for dievini) and the supervisory director nominated by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for KfW) shall be required. Similarly, the affirmative votes of at least one supervisory director nominated by dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for dievini) and the supervisory director nominated by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) (during the initial nomination period for KfW) shall be required for certain resolutions of the supervisory board specified by our articles of association and the internal rules applicable to our supervisory board.

The absence of the approval of the supervisory board shall result in the relevant resolution being null and void but shall not affect the powers of representation of the management board or of the managing directors.

Our management board is entitled to represent us. The power to represent us also vests in the chief executive officer individually, as well as in any other two managing directors acting jointly.

Delaware. The board of directors bears the ultimate responsibility for managing the business and affairs of a corporation. In discharging this function, directors of a Delaware corporation owe fiduciary duties of care and loyalty to the corporation and to its stockholders. Delaware courts have decided that the directors of a Delaware corporation are required to exercise informed business judgment in the performance of their duties. Informed business judgment means that the directors have informed themselves of all material information reasonably available to them. Delaware courts have also imposed a heightened standard of conduct upon directors of a Delaware corporation who take any action designed to defeat a threatened change in control of the corporation. In addition, under Delaware law, when the board of directors of a Delaware corporation approves the sale or break-up of a corporation, the board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the stockholders.

Director Terms

The Netherlands. The DCGC provides the following best practice recommendations on the terms for tenure of managing directors and supervisory directors:

- Managing directors should be appointed for a maximum period of four years, without limiting the number of consecutive terms managing directors may serve.

- Supervisory directors should be appointed for two consecutive periods of no more than four years. Thereafter, supervisory directors may be reappointed for a maximum of two consecutive periods of no more than two years, provided that any reappointment after an eight-year term of office should be disclosed in the company's annual report.

The general meeting shall at all times be entitled to suspend or dismiss a managing director or supervisory director. Under our articles of association, the general meeting may only adopt a resolution to suspend or dismiss such director by at least a two-thirds majority of the votes cast, provided that such majority represents more than half of the issued share capital, unless the resolution is passed at the proposal of the supervisory board or, with respect to supervisory directors nominated by dievini or KfW, by dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) or by KfW (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for KfW, respectively, in which case a simple majority of the votes cast is sufficient. In addition, the supervisory board may at any time suspend a managing director. A suspension by the supervisory board can at any time be lifted by the general meeting. If a managing director is suspended and the general meeting does not resolve to dismiss him or her within three months from the date of such suspension, the suspension shall lapse.

Delaware. The Delaware General Corporation Law generally provides for a one-year term for directors, but permits directorships to be divided into up to three classes with up to three-year terms, with the years for each class expiring in different years, if permitted by the certificate of incorporation, an initial bylaw or a bylaw adopted by the stockholders. A director elected to serve a term on a "classified" board may not be removed by stockholders without cause. There is no limit in the number of terms a director may serve.

Director Vacancies

The Netherlands. Under Dutch law, managing directors and supervisory directors of a company like ours are appointed and reappointed by the general meeting. Under our articles of association, managing directors and supervisory directors are appointed by the general meeting upon the binding nomination by our supervisory board. During the periods specified below, dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement), KfW (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement), and any nomination concert have the right to make a binding nomination for one or more supervisory directors as specified below:

- during the initial nomination period for dievini, dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) will have the right under our articles of association to make a binding nomination for the following number of supervisory directors:
 - four (4) supervisory directors for as long as dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 70% of our issued share capital;
 - three (3) supervisory directors for as long as dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 50% (but less than 70%) of our issued share capital;
 - two (2) supervisory directors for as long as dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 30% (but less than 50%) of our issued share capital; and
 - one (1) supervisory director for as long as dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and its affiliates as defined by our articles of association and ultimate beneficiaries as defined by our articles of association (individually or collectively) owns at least 10% (but less than 30%) of our issued share capital;

- during the initial nomination period for KfW, KfW (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) will have the right under our articles of association to make a binding nomination for one supervisory director; and
- at any time, each nomination concert (excluding dievini, its affiliates and its ultimate beneficiaries and excluding KfW and its affiliates for as long as dievini and KfW, respectively, have the nomination rights discussed above) will have the right under our articles of association to make a binding nomination for one supervisory director for each 20% of our issued share capital represented by that nomination concert, provided such nominee is independent from the nomination concert and CureVac N.V. under the DCGC and applicable U.S. securities laws and Nasdaq rules.

The general meeting may at all times overrule the binding nomination by a resolution adopted by a simple majority of the votes cast, provided that such majority represents at least one-third of the issued share capital. If the general meeting overrules the binding nature of a binding nomination, a new nomination shall be prepared by whoever made the overruled nomination.

If dievini, KfW and/or a nomination concert loses the right to nominate one or more of our supervisory directors, as applicable, the supervisory director(s) so nominated must promptly resign. A supervisory director nominated by a nomination concert must also promptly resign once that supervisory director is no longer independent from the nomination concert or our company.

Prior to the closing of this offering, our supervisory board shall adopt a diversity policy for the composition of our management board and our supervisory board, as well as a profile for the composition of the supervisory board. The supervisory board shall make any nomination for the appointment of a managing director or supervisory director with due regard to the rules and principles set forth in such diversity policy and profile, as applicable.

Under Dutch law, when nominating a person for appointment or reappointment as a supervisory director, the nomination must be supported by reasons (if it concerns a reappointment, past performance must be taken into consideration) and the following information about such person must be provided: (i) age and profession; (ii) the aggregate nominal value of the shares held in the company's capital; (iii) present and past positions, to the extent relevant for the performance of the tasks of a supervisory director; and (iv) the name of each entity where such person already holds a position as supervisory director or non-executive director (in case of multiple entities within the same group, the name of the group shall suffice).

Delaware. The Delaware General Corporation Law provides that vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) unless (i) otherwise provided in the certificate of incorporation or bylaws of the corporation or (ii) the certificate of incorporation directs that a particular class of stock is to elect such director, in which case any other directors elected by such class, or a sole remaining director elected by such class, will fill such vacancy.

Conflict-of-Interest Transactions

The Netherlands. Under Dutch law and our articles of association, our managing directors and supervisory directors shall not take part in any discussion or decision-making that involves a subject or transaction in relation to which he or she has a direct or indirect personal conflict of interest with us. Such a conflict of interest would generally arise if the managing director or supervisory director concerned is unable to serve our interests and the business connected with it with the required level of integrity and objectivity due to the existence of the conflicting personal interest. Our articles of association provide that if as a result of conflicts of interests no resolution of the management board can be adopted, the resolution may be passed by the supervisory board and that, if as a result of conflicts of interests no resolution of the supervisory board can be adopted, the resolution may nonetheless be adopted by the supervisory board as if none of the supervisory directors had a conflict of interest. In that case, each supervisory director is entitled to participate in the discussion and decision-making process and to cast a vote.

The DCGC provides the following best practice recommendations in relation to conflicts of interests in respect of managing directors or supervisory directors:

- A managing director should report any potential conflict of interest in a transaction that is of material significance to the company and/or to such person to the chairman of the supervisory

board and to the other members of the management board without delay. The managing director should provide all relevant information in that regard, including the information relevant to the situation concerning his or her spouse, registered partner or other life companion, foster child and relatives by blood or marriage up to the second degree.

- A supervisory director should report any conflict of interest or potential conflict of interest in a transaction that is of material significance to the company and/or to such person to the chairman of the supervisory board without delay and should provide all relevant information in that regard, including the relevant information pertaining to his or her spouse, registered partner or other life companion, foster child and relatives by blood or marriage up to the second degree. If the chairman of the supervisory board has a conflict of interest or potential conflict of interest, he or she should report this to the vice-chairman of the supervisory board without delay.
- The supervisory board should decide, outside the presence of the managing director or supervisory director concerned, whether there is a conflict of interest.
- All transactions in which there are conflicts of interest with managing directors or supervisory directors should be agreed on terms that are customary in the market.
- Decisions to enter into transactions in which there are conflicts of interest with managing directors or supervisory directors that are of material significance to the company and/or to the relevant managing directors or supervisory directors should require the approval of the supervisory board. Such transactions should be published in the annual report, together with a description of the conflict of interest and a declaration that the relevant best practice provisions of the DCGC have been complied with.

Delaware. The Delaware General Corporation Law generally permits transactions involving a Delaware corporation and an interested director of that corporation if:

- the material facts as to the director's relationship or interest are disclosed and a majority of disinterested directors consent;
- the material facts are disclosed as to the director's relationship or interest and a majority of shares entitled to vote thereon consent; or
- the transaction is fair to the corporation at the time it is authorized by the board of directors, a committee of the board of directors or the stockholders.

Proxy Voting by Directors

The Netherlands. An absent managing director may issue a proxy for a specific management board meeting but only to another managing director in writing or by electronic means. An absent supervisory director may issue a proxy for a specific supervisory board meeting but only to another supervisory director in writing or by electronic means.

Delaware. A director of a Delaware corporation may not issue a proxy representing the director's voting rights as a director.

Shareholder Rights

Voting Rights

The Netherlands. In accordance with Dutch law and our articles of association, each issued common share confers the right to cast one vote at the general meeting. Each holder of shares may cast as many votes as it holds shares. No votes may be cast on shares that are held by us or our direct or indirect subsidiaries or on shares for which we or our subsidiaries hold depository receipts. Nonetheless, the holders of a right of use and enjoyment (*vruchtgebruik*) and the holders of a right of pledge (*pandrecht*) in respect of shares held by us or our subsidiaries in our share capital are not excluded from the right to vote on such shares, if the right of use and enjoyment (*vruchtgebruik*) or the right of pledge (*pandrecht*) was granted prior to the time such shares were acquired by us or any of our subsidiaries. Neither we nor any of our subsidiaries may cast votes in respect of a share on which we or such subsidiary holds a right of use and enjoyment (*vruchtgebruik*) or a right of pledge (*pandrecht*).

In accordance with our articles of association, for each general meeting, the management board may determine that a record date will be applied in order to establish which shareholders are entitled to attend and vote at the general meeting. Such record date shall be the 28th day prior to the day of the general meeting. The record date and the manner in which shareholders can register and exercise their rights will be set out in the notice of the meeting which must be published in a Dutch daily newspaper with national distribution at least 15 days prior to the meeting (and such notice may therefore be published after the record date for such meeting). Under our articles of association, shareholders and others with meeting rights under Dutch law must notify us in writing or by electronic means of their identity and intention to attend the general meeting. This notice must be received by us ultimately on the seventh day prior to the general meeting, unless indicated otherwise when such meeting is convened.

Delaware. Under the Delaware General Corporation Law, each stockholder is entitled to one vote per share of stock, unless the certificate of incorporation provides otherwise. In addition, the certificate of incorporation may provide for cumulative voting at all elections of directors of the corporation, or at elections held under specified circumstances. Either the certificate of incorporation or the bylaws may specify the number of shares and/or the amount of other securities that must be represented at a meeting in order to constitute a quorum, but in no event will a quorum consist of less than one-third of the shares entitled to vote at a meeting.

Stockholders as of the record date for the meeting are entitled to vote at the meeting, and the board of directors may fix a record date that is no more than 60 nor less than 10 days before the date of the meeting, and if no record date is set then the record date is the close of business on the day next preceding the day on which notice is given, or if notice is waived then the record date is the close of business on the day next preceding the day on which the meeting is held. The determination of the stockholders of record entitled to notice or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, but the board of directors may fix a new record date for the adjourned meeting.

Shareholder Proposals

The Netherlands. Pursuant to our articles of association, extraordinary general meetings will be held whenever required under Dutch law or whenever our management board or supervisory board deems such to be appropriate or necessary. Pursuant to Dutch law, one or more shareholders or others with meeting rights under Dutch law representing at least one-tenth of the issued share capital may request us to convene a general meeting, setting out in detail the matters to be discussed. If we have not taken the steps necessary to ensure that such meeting can be held within six weeks after the request, the requesting party or parties may, on their application, be authorized by the competent Dutch court in preliminary relief proceedings to convene a general meeting.

Also, the agenda for a general meeting shall include such items requested by one or more shareholders, and others entitled to attend general meetings, representing at least 3% of the issued share capital, except where the articles of association state a lower percentage. Our articles of association do not state such lower percentage. Requests must be made in writing or by electronic means and received by us at least 60 days before the day of the meeting.

In accordance with the DCGC and our articles of association, a shareholder shall exercise the right of putting an item on the agenda only after consulting the management board in that respect. If one or more shareholders intend to request that an item be put on the agenda that may result in a change in the company's strategy (for example, the removal of managing directors or supervisory directors), the management board must be given the opportunity to invoke a reasonable period to respond to such intention. Such period shall not exceed 180 days (or such other period as may be stipulated for such purpose by Dutch law and/or the DCGC from time to time). If invoked, the management board must use such response period for further deliberation and constructive consultation, in any event with the shareholders(s) concerned, and shall explore the alternatives. At the end of the response time, the management board shall report on this consultation and the exploration of alternatives to the general meeting. This shall be supervised by our supervisory board. The response period may be invoked only once for any given general meeting and shall not apply: (a) in respect of a matter for which a response period has been previously invoked; or (b) if a shareholder holds at least 75% of the company's issued share capital as a consequence of a successful public bid. The response period may also be invoked in response to shareholders or others with meeting rights under Dutch law requesting that a general meeting be convened, as described above.

Delaware. Delaware law does not specifically grant stockholders the right to bring business before an annual or special meeting. However, if a Delaware corporation is subject to the SEC's proxy rules, a

stockholder who owns at least \$2,000 in market value, or 1% of the corporation's securities entitled to vote, may propose a matter for a vote at an annual or special meeting in accordance with those rules.

Action by Written Consent

The Netherlands. Under Dutch law, shareholders' resolutions may be adopted in writing without holding a meeting of shareholders, provided that (i) the articles of association allow such action by written consent, (ii) the company has not issued bearer shares or, with its cooperation, depository receipts for shares in its capital, and (iii) the resolution is adopted unanimously by all shareholders that are entitled to vote. Although our articles of association allow for shareholders' resolutions to be adopted in writing, the requirement of unanimity renders the adoption of shareholder resolutions without holding a meeting not feasible for us as a publicly traded company.

Delaware. Although permitted by Delaware law, publicly listed companies do not typically permit stockholders of a corporation to take action by written consent.

Appraisal Rights

The Netherlands. Subject to certain exceptions, Dutch law does not recognize the concept of appraisal or dissenters' rights. However, Dutch law does provide for squeeze-out procedures as described under "Dividends and Other Distributions — Squeeze-Out Procedures." Also, Dutch law provides for cash exit rights in certain situations for dissenting shareholders of a company organized under Dutch law entering into certain types of mergers. In those situations, a dissenting shareholder may file a claim with the Dutch company for compensation. Such compensation shall then be determined by one or more independent experts. The shares of such shareholder that are subject to such claim will cease to exist as of the moment of entry into effect of the merger.

Delaware. The Delaware General Corporation Law provides for stockholder appraisal rights, or the right to demand payment in cash of the judicially determined fair value of the stockholder's shares, in connection with certain mergers and consolidations.

Shareholder Suits

The Netherlands. In the event a third-party is liable to a Dutch company, only the company itself can bring a civil action against that party. The individual shareholders do not have the right to bring an action on behalf of the company. Only in the event that the cause for the liability of a third-party to the company also constitutes a tortious act directly against a shareholder does that shareholder have an individual right of action against such third-party in its own name. Dutch law provides for the possibility to initiate such actions collectively, in which a foundation or an association can act as a class representative and has standing to commence proceedings and claim damages if certain criteria are met. The court will first determine if those criteria are met. If so, the case will go forward as a class action on the merits after a period allowing class members to opt out from the case has lapsed. All members of the class who are residents of the Netherlands and who did not opt-out will be bound to the outcome of the case. Residents of other countries must actively opt in in order to be able to benefit from the class action. The defendant is not required to file defenses on the merits prior to the merits phase having commenced. It is possible for the parties to reach a settlement during the merits phase. Such a settlement can be approved by the court, which approval will then bind the members of the class, subject to a second opt-out. This new regime applies to claims brought after January 1, 2020 and which relate to certain events that occurred prior to that date. For other matters, the old Dutch class actions regime will apply. Under the old regime, no monetary damages can be sought. Also, a judgment rendered under the old regime will not bind individual class members. Even though Dutch law does not provide for derivative suits, directors and officers can still be subject to liability under U.S. securities laws.

Delaware. Under the Delaware General Corporation Law, a stockholder may bring a derivative action on behalf of the corporation to enforce the rights of the corporation. An individual also may commence a class action suit on behalf of himself and other similarly situated stockholders where the requirements for maintaining a class action under Delaware law have been met. A person may institute and maintain such a suit only if that person was a stockholder at the time of the transaction which is the subject of the suit. In addition, under Delaware case law, the plaintiff normally must be a stockholder at the time of the transaction that is the subject of the suit and throughout the duration of the derivative suit.

Delaware law also requires that the derivative plaintiff make a demand on the directors of the corporation to assert the corporate claim before the suit may be prosecuted by the derivative plaintiff in court, unless such a demand would be futile.

Repurchase of Shares

The Netherlands. Under Dutch law, when issuing shares, a public company such as ours may not subscribe for newly issued shares in its own capital. Such company may, however, subject to certain restrictions of Dutch law and its articles of association, acquire shares in its own capital. A listed public company such as ours may acquire fully paid shares in its own capital at any time for no valuable consideration. Furthermore, subject to certain provisions of Dutch law and its articles of association, such company may repurchase fully paid shares in its own capital if (i) the company's shareholders' equity less the payment required to make the acquisition does not fall below the sum of paid-in and called-up share capital plus any reserves required by Dutch law or its articles of association and (ii) the aggregate nominal value of shares of the company which the company acquires, holds or on which the company holds a pledge (*pandrecht*) or which are held by a subsidiary of the company, would not exceed 50% of its then-current issued share capital. Such company may only acquire its own shares if its general meeting has granted the management board the authority to effect such acquisitions.

An acquisition of common shares for a consideration must be authorized by our general meeting. Such authorization may be granted for a maximum period of 18 months and must specify the number of common shares that may be acquired, the manner in which common shares may be acquired and the price limits within which common shares may be acquired. The actual acquisition may only be effected pursuant to a resolution of our management board, with the approval of our supervisory board. Prior to the closing of this offering, our management board, subject to approval by our supervisory board, will be authorized, for a period of 18 months to cause the repurchase of common shares by us of up to 20% of our issued share capital, for a price per share not exceeding 110% of the average market price of our common shares on Nasdaq (such average market price being the average of the closing prices on each of the five consecutive trading days preceding the date the acquisition is agreed upon by us). These shares may be used to deliver shares underlying awards granted pursuant to our equity-based compensation plans.

Our management board, subject to approval by our supervisory board, will also be authorized, for a period of 18 months to cause the repurchase of preferred shares, for a price which is higher than nil and does not exceed the nominal value thereof. No authorization of the general meeting is required if fully paid common shares are acquired by us with the intention of transferring such common shares to our employees under an applicable employee share purchase plan.

Delaware. Under the Delaware General Corporation Law, a corporation may purchase or redeem its own shares unless the capital of the corporation is impaired or the purchase or redemption would cause an impairment of the capital of the corporation. A Delaware corporation may, however, purchase or redeem out of capital any of its preferred shares or, if no preferred shares are outstanding, any of its own shares if such shares will be retired upon acquisition and the capital of the corporation will be reduced in accordance with specified limitations.

Anti-Takeover Provisions

The Netherlands. Under Dutch law, various protective measures are possible and permissible within the boundaries set by Dutch law and Dutch case law. In this respect, certain provisions of our articles of association may make it more difficult for a third-party to acquire control of us or effect a change in our management board and supervisory board. These provisions include:

- the authorization of a class of preferred shares that, after the expiration of the later of the initial period or the initial approval period, may be issued to a protective foundation pursuant to a call option to that effect, see "Risk factors — Provisions of our articles of association or Dutch corporate law might deter acquisition bids for us that might be considered favorable and prevent, delay or frustrate any attempt to replace or remove the members of our managing directors or supervisory directors."
- a provision that our managing directors and supervisory directors are appointed on the basis of a binding nomination, the binding nature of which can only be overruled by a simple majority of votes cast representing at least one-third of our issued share capital;

- a provision that our managing directors and supervisory directors may only be dismissed by the general meeting by a two-thirds majority of votes cast representing more than 50% of our issued share capital (unless the dismissal is proposed by the supervisory board or, with respect to supervisory directors nominated by dievini or KfW, by dievini (or its legal successor) or permitted assigns under the KfW dievini Shareholders' Agreement during the nomination period for dievini or by KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for KfW, respectively, in which case a simple majority of the votes would be sufficient);
- a provision that where a supervisory director is no longer in office or is unable to act, he or she may be replaced temporarily by a person whom the supervisory board has designated for that purpose and, where a supervisory director who has been appointed upon a nomination of dievini or KfW, as applicable, is no longer in office or unable to act, such supervisory director may only be temporarily replaced by a person designated for such purposes by dievini or KfW, as applicable. Such person shall become a full member of the supervisory board with the rights of the relevant supervisory director appointed upon a nomination of dievini or KfW, as applicable, as soon as a written designation to that effect has been received by the chairman or vice-chairman of our supervisory board, subject to limitations, under applicable law regarding dievini's rights under this provision;
- a provision allowing, among other matters, a former chairman of our supervisory board, a former nominee of dievini, and a former nominee of KfW, to jointly take on the supervisory functions, which persons jointly may designate one or more other persons to be charged with the supervision of our company (instead of or together with the former chairman of our supervisory board), as applicable, to manage our affairs if all of our managing directors and supervisory directors are removed from office and to appoint others to be charged with the management and supervision of our affairs, until new managing directors and supervisory directors are appointed by the general meeting on the basis of a binding nomination discussed above;
- a provision allowing the management board to temporarily replace a managing director who is no longer in office or unable to act, by another person or persons designated for this purpose by the management board and attributing the management of the company to the supervisory board in case all managing directors are no longer in office or unable to act;
- a provision that certain provisions of our articles of association can only be amended with the affirmative vote of (i) during the nomination period for dievini, dievini (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement) and (ii) during the nomination period for KfW, KfW (or its legal successors or permitted assigns under the KfW dievini Shareholders' Agreement); and
- a requirement that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our management board.

In addition, Dutch law allows for staggered multi-year terms of our managing directors and supervisory directors, as a result of which only part of our managing directors and supervisory directors may be subject to appointment or re-appointment in any one year.

Delaware. In addition to other aspects of Delaware law governing fiduciary duties of directors during a potential takeover, the Delaware General Corporation Law also contains a business combination statute that protects Delaware companies from hostile takeovers and from actions following the takeover by prohibiting some transactions once an acquirer has gained a significant holding in the corporation.

Section 203 of the Delaware General Corporation Law prohibits "business combinations," including mergers, sales and leases of assets, issuances of securities and similar transactions by a corporation or a subsidiary with an interested stockholder that beneficially owns 15% or more of a corporation's voting stock, within three years after the person becomes an interested stockholder, unless:

- the transaction that will cause the person to become an interested stockholder is approved by the board of directors of the target prior to the transactions;
- after the completion of the transaction in which the person becomes an interested stockholder, the interested stockholder holds at least 85% of the voting stock of the corporation not including

shares owned by persons who are directors and officers of interested stockholders and shares owned by specified employee benefit plans; or

- after the person becomes an interested stockholder, the business combination is approved by the board of directors of the corporation and holders of at least 66.67% of the outstanding voting stock, excluding shares held by the interested stockholder.

A Delaware corporation may elect not to be governed by Section 203 by a provision contained in the original certificate of incorporation of the corporation or an amendment to the original certificate of incorporation or to the bylaws of the company, which amendment must be approved by a majority of the shares entitled to vote and may not be further amended by the board of directors of the corporation. Such an amendment is not effective until 12 months following its adoption.

Inspection of Books and Records

The Netherlands. The management board and the supervisory board provide the general meeting, within a reasonable amount of time, all information that the shareholders require for the exercise of their powers, unless this would be contrary to an overriding interest of our company. If the management board or supervisory board invokes such an overriding interest, it must give reasons.

Delaware. Under the Delaware General Corporation Law, any stockholder may inspect for any proper purpose certain of the corporation's books and records during the corporation's usual hours of business.

Dismissal of Directors

The Netherlands. Under our articles of association, the general meeting shall at all times be entitled to dismiss a managing director or supervisory director. The general meeting may only adopt a resolution to suspend or dismiss a managing director or supervisory director by at least a two-thirds majority of the votes cast, provided that such majority represents more than half of the issued share capital, unless the proposal was made by the supervisory board or, with respect to supervisory directors nominated by dievini or KfW, by dievini (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for dievini or by KfW (or its legal successor or permitted assigns under the KfW dievini Shareholders' Agreement) during the nomination period for KfW, respectively, in which latter case a simple majority is sufficient.

Delaware. Under the Delaware General Corporation Law, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except (i) unless the certificate of incorporation provides otherwise, in the case of a corporation whose board is classified, stockholders may effect such removal only for cause, or (ii) in the case of a corporation having cumulative voting, if less than the entire board is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which he or she is a part.

Issuance of Shares

The Netherlands. Under Dutch law, a company's general meeting is the corporate body authorized to resolve on the issuance of shares and the granting of rights to subscribe for shares. The general meeting can delegate such authority to another corporate body of the company, such as the management board, for a period not exceeding five years; this authorization may only be extended from time to time for a maximum period of five years. In order for a resolution of the general meeting on an issuance or an authorization as discussed in the previous sentence to be valid, a prior or simultaneous approval shall be required from each meeting of holders of a certain class of shares whose rights are prejudiced by the issuance.

Prior to the closing of this offering, our management board, with the approval of our supervisory board, will be authorized, for a period of five years, to issue shares or grant rights to subscribe for shares up to our authorized share capital from time to time. We may not subscribe for our own shares on issue.

Delaware. All creation of shares require the board of directors to adopt a resolution or resolutions, pursuant to authority expressly vested in the board of directors by the provisions of the company's certificate of incorporation.

Preemptive Rights

The Netherlands. Under Dutch law, in the event of an issuance of common shares, each shareholder will have a pro rata preemptive right in proportion to the aggregate nominal value of the common shares held by such holder (with the exception of common shares to be issued to employees or common shares issued against a contribution other than in cash or pursuant to the exercise of a previously acquired right to subscribe for shares). Our preferred shares carry no preemptive rights. Under our articles of association, the preemptive rights in respect of newly issued common shares may be restricted or excluded by a resolution of the general meeting. Another corporate body, such as the management board, may restrict or exclude the preemptive rights in respect of newly issued common shares if it has been designated as the authorized body to do so by the general meeting. Such designation can be granted for a period not exceeding five years. A resolution of the general meeting to restrict or exclude the preemptive rights or to designate another corporate body as the authorized body to do so requires a majority of not less than two-thirds of the votes cast, if less than one-half of our issued share capital is represented at the meeting. Prior to the closing of this offering, our management board, with the approval of our supervisory board, will be authorized, for a period not exceeding five years to limit or exclude preemptive rights in relation to an issuance of shares or a grant of rights to subscribe for shares that the management board is authorized to resolve upon (see above under “Issuance of Shares”).

Delaware. Under the Delaware General Corporation Law, stockholders have no preemptive rights to subscribe for additional issues of stock or to any security convertible into such stock unless, and to the extent that, such rights are expressly provided for in the certificate of incorporation.

Dividends

The Netherlands. Dutch law provides that dividends (if it concerns a distribution of profits) may be distributed after adoption of the annual accounts by the general meeting from which it appears that such dividend distribution is allowed. Moreover, dividends may be distributed, whether as a distribution of profits or of freely distributable reserves, only to the extent the shareholders’ equity exceeds the amount of the paid-in and called-up issued share capital and the reserves that must be maintained under the law or the articles of association. Interim dividends may be declared as provided in the articles of association and may be distributed to the extent that the shareholders’ equity exceeds the amount of the paid-in and called-up issued share capital plus any reserves as described above as apparent from our interim financial statements prepared under Dutch law.

Under our articles of association, our management board, with the approval of our supervisory board, may decide that all or part of the profits are carried to reserves. Before reservation of any profit, to the extent that preferred shares have been cancelled and preferred distributions on those cancelled shares are outstanding, the profits are first to be used to satisfy the outstanding claim to those who held those preferred shares at the moment of such cancellation becoming effective and subsequently if any preferred shares are outstanding, the preferred dividend is paid out of the remaining profit on the preferred shares in accordance with our articles of association. The remaining profit will be at the disposal of the general meeting at the proposal of the management board for distribution on the common shares, subject to restrictions of Dutch law and approval by our supervisory board of such proposal of our management board. Our management board is permitted, subject to certain requirements, to declare interim dividends without the approval of the general meeting, but only with the approval of the supervisory board. Dividends and other distributions shall be made payable not later than the date determined by the management board. Claims to dividends and other distributions not made within five years from the date that such dividends or distributions became payable will lapse and any such amounts will be considered to have been forfeited to us (*verjaring*).

Delaware. Under the Delaware General Corporation Law, a Delaware corporation may pay dividends out of its surplus (the excess of net assets over capital), or in case there is no surplus, out of its net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year (provided that the amount of the capital of the corporation is not less than the aggregate amount of the capital represented by the issued and outstanding stock of all classes having a preference upon the distribution of assets). In determining the amount of surplus of a Delaware corporation, the assets of the corporation, including stock of subsidiaries owned by the corporation, must be valued at their fair market value as determined by the board of directors, without regard to their historical book value. Dividends may be paid in the form of common stock, property or cash.

Shareholder Vote on Certain Reorganizations

The Netherlands. Under Dutch law, the general meeting must approve resolutions of the management board relating to a significant change in the identity or the character of the company or the business of the company, which includes:

- a transfer of the business or virtually the entire business to a third-party;
- the entry into or termination of a long-term cooperation of the company or a subsidiary with another legal entity or company or as a fully liable partner in a limited partnership or general partnership, if such cooperation or termination is of a far-reaching significance for the company; and
- the acquisition or divestment by the company or a subsidiary of a participating interest in the capital of a company having a value of at least one-third of the amount of its assets according to its balance sheet and explanatory notes or, if the company prepares a consolidated balance sheet, according to its consolidated balance sheet and explanatory notes in the last adopted annual accounts of the company.

Delaware. Under the Delaware General Corporation Law, the vote of a majority of the outstanding shares of capital stock entitled to vote thereon generally is necessary to approve a merger or consolidation or the sale of all or substantially all of the assets of a corporation. The Delaware General Corporation Law permits a corporation to include in its certificate of incorporation a provision requiring for any corporate action the vote of a larger portion of the stock or of any class or series of stock than would otherwise be required.

Under the Delaware General Corporation Law, no vote of the stockholders of a surviving corporation to a merger is needed, however, unless required by the certificate of incorporation, if (i) the agreement of merger does not amend in any respect the certificate of incorporation of the surviving corporation, (ii) the shares of stock of the surviving corporation are not changed in the merger and (iii) the number of shares of common stock of the surviving corporation into which any other shares, securities or obligations to be issued in the merger may be converted does not exceed 20% of the surviving corporation's common stock outstanding immediately prior to the effective date of the merger. In addition, stockholders may not be entitled to vote in certain mergers with other corporations that own 90% or more of the outstanding shares of each class of stock of such corporation, but the stockholders will be entitled to appraisal rights.

Remuneration of Managing Directors and Supervisory Directors

The Netherlands.

The supervisory board determines the remuneration of individual managing directors with due observance of the compensation policy at the recommendation of our compensation committee. A proposal with respect to remuneration schemes in the form of shares or rights to shares in which managing directors may participate is subject to approval by our general meeting. Such a proposal must set out at least the maximum number of shares or rights to subscribe for shares to be granted to the managing directors and the criteria for granting or amendment. The compensation for our supervisory directors is set by the general meeting.

Delaware. Under the Delaware General Corporation Law, the stockholders do not generally have the right to approve the compensation policy for directors or the senior management of the corporation, although certain aspects of the compensation policy may be subject to stockholder vote due to the provisions of U.S. federal securities and tax law.

COMMON SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no market for our common shares. Future sales of substantial amounts of our common shares in the public market could adversely affect market prices prevailing from time to time. Furthermore, because only a limited number of common shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common shares in the public market after such restrictions lapse. This may adversely affect the prevailing market price and our ability to raise equity capital in the future.

Upon completion of this offering, we will have _____ common shares outstanding assuming the exercise in full of the underwriters' option to purchase additional common shares. Of these _____ shares, _____ common shares, or _____ common shares if the underwriters exercise their option in full to purchase additional common shares, sold in this offering will be freely transferable without restriction or registration under the Securities Act, except for any common shares purchased by one of our existing "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining _____

common shares existing are "restricted shares" as defined in Rule 144. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 701 of the Securities Act. As a result of the contractual 180-day lock-up period described below and the provisions of Rules 144 and 701, these shares will be available for sale in the public market as follows:

Rule 144

In general, a person who has beneficially owned our common shares that are restricted shares for at least six months would be entitled to sell such securities, provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned our common shares that are restricted shares for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of our common shares then outstanding, which will equal approximately _____ common shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares; or
- the average weekly trading volume of our common shares on The Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale; provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144 to the extent applicable.

Rule 701

In general, under Rule 701, any of our employees, managing directors, supervisory directors, officers, consultants or advisors who purchases shares from us in connection with a compensatory share or option plan or other written agreement before the effective date of this offering is entitled to resell such shares 90 days after the effective date of this offering in reliance on Rule 144, without having to comply with the holding period requirements or other restrictions contained in Rule 701.

The SEC has indicated that Rule 701 will apply to typical share options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after the date of this prospectus. Securities issued in reliance on Rule 701 are restricted securities and, subject to the contractual restrictions described below, beginning 90 days after the date of this prospectus, may be sold by persons other than "affiliates," as defined in Rule 144, subject only to the manner of sale provisions of Rule 144 and by "affiliates" under Rule 144 without compliance with its one-year minimum holding period requirement.

Regulation S

Regulation S provides generally that sales made in offshore transactions are not subject to the registration or prospectus-delivery requirements of the Securities Act.

Registration Rights Agreement

We also intend to enter into a registration rights agreement upon consummation of this offering, pursuant to which each holder of at least 10% of our common shares and certain other holders of our common shares will be entitled to various rights with respect to the registration of their common shares under the Securities Act. Each holder party to the registration rights agreement or an Eligible Shareholder shall continue to have various rights with respect to the registration of its common shares under the Securities Act, until 90 days after such shareholder, including its affiliates, cease to hold at least 10% of our common shares, or any other future class of shares. The registration of these common shares under the Securities Act would result in these common shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. We will not be required to register such common shares if an exemption from the registration requirements of the U.S. Securities Act is available with respect to the number of our common shares desired to be sold.

Form F-1 Registration Statement

At any time beginning 180 days after the consummation of this offering, any Eligible Shareholder or group of Eligible Shareholders, will be entitled to demand in writing that we effect the registration under the Securities Act of the sale or other transfer of such shareholder or shareholders' common shares, provided that we are not required to effect more than three such registrations and that the aggregate anticipated offering price from the sale of such shares equals at least \$35 million, subject to certain exemptions.

Form F-3 Registration Statement

After we become eligible to file a registration statement on Form F-3, which will not be until at least 12 months after the date of this prospectus, each Eligible Shareholder or group of Eligible Shareholders may request in writing, not more than three times within 12-month period, that we effect a registration of the sale or other transfer of such shares, provided that the aggregate anticipated offering price from the sale of such shares equals at least \$15 million. We will not be obligated to file a registration statement on Form F-3 in certain customary cases, subject to certain exemptions.

Piggyback Registration Rights

The registration rights agreement will provide our Eligible Shareholders with "piggy back" registration rights in the event that we determine to register the sale of any of our securities following this offering. With respect to such registration rights, we will commit to use our reasonable best efforts to include in a registration statement a prospectus relating to the resale of certain securities held by certain of our Eligible Shareholders.

Lock-Up agreements

All of our managing directors and supervisory directors and the holders of substantially all of our common shares have agreed, subject to limited exceptions, not to offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise dispose of, directly or indirectly, or enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common shares or such other securities for a period of 180 days after the date of this prospectus, subject to certain exceptions, without the prior written consent of BofA Securities, Inc. and Jefferies LLC. See "Underwriting."

TAXATION

The following summary contains a description of certain Dutch, German and U.S. federal income tax consequences of the acquisition, ownership and disposition of common shares, but it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase common shares. The summary is based upon the tax laws of the Netherlands and regulations thereunder, the tax laws of Germany and regulations thereunder and the tax laws of the United States and regulations thereunder as of the date hereof, which are subject to change. You should consult your tax advisor regarding the applicable tax consequences to you of investing in our common shares.

Material Dutch Tax Considerations

General

The following is a general summary of certain material Dutch tax consequences of the acquisition, ownership and disposal of our common shares. This summary does not purport to set forth all possible tax considerations or consequences that may be relevant to a holder or prospective holder or our common shares and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as trusts or similar arrangements) may be subject to special rules. In view of its general nature, it should be treated with corresponding caution.

This summary is based on the tax laws of the Netherlands, published regulations thereunder and published authoritative case law, all as in effect on the date hereof, and all of which are subject to change, possibly with retroactive effect. Where the summary refers to “the Netherlands” or “Dutch” it refers only to the part of the Kingdom of the Netherlands located in Europe.

This discussion is for general information purposes and is not tax advice or a complete description of all Dutch tax consequences relating to the acquisition, ownership and disposal of our common shares. Holders or prospective holders of our common shares should consult their own tax advisor regarding the tax consequences relating to the acquisition, holding and disposal of our common shares in light of their particular circumstances.

Please note that this section does not set forth the tax considerations for:

- holders of common shares if such holders, and in the case of individuals, such holder’s partner or certain relatives by blood or marriage in the direct line (including foster children), have a substantial interest (*aanmerkelijk belang*) or deemed substantial interest (*fictief aanmerkelijk belang*) in us within the meaning of chapter 4 of the Dutch Income Tax Act 2001 (*Wet inkomstenbelasting 2001*). Generally, a holder of securities in a company is considered to hold a substantial interest in such company if such holder alone or, in the case of individuals, together with such holder’s partner (as defined in the Dutch Income Tax Act 2001), directly or indirectly holds (i) an interest of 5% or more of the total issued and outstanding capital of that company or of 5% or more of the issued and outstanding capital of a certain class of shares of that company; or (ii) rights to acquire, directly or indirectly, such interest; or (iii) certain profit sharing rights in that company that relate to 5% or more of the company’s annual profits and/or to 5% or more of the company’s liquidation proceeds. A deemed substantial interest exists if a substantial interest (or part thereof) in a company has been disposed of, or is deemed to have been disposed of, on a non-recognition basis;
- holders of common shares that are not an individual and for which the common shares qualify or qualified as a participation (*deelneming*) for purposes of the participation exemption (*deelnemingsvrijstelling*) as defined in Section 13 of the Dutch Corporate Income Tax Act 1969 (*Wet op de vennootschapsbelasting 1969*). Generally, the common shares qualify as a participation as a result of which the participation exemption applies to the common shares if the holder of common shares is subject to Dutch corporate income tax and it, or a related entity, holds 5% or more in our nominal paid-in share capital (or, in certain cases, in voting rights);
- pension funds, investment institutions (*fiscale beleggingsinstellingen*), exempt investment institutions (*vrijgestelde beleggingsinstellingen*) (as defined in the Dutch Corporate Income Tax

Act 1969) and other entities that are, in whole or in part, not subject to or exempt from corporate income tax in the Netherlands; and

- holders of common shares who are individuals and for whom the common shares or any benefit derived from the common shares are a remuneration or deemed to be a remuneration for (employment) activities performed by such holders or certain individuals related to such holders (as defined in the Dutch Income Tax Act 2001).

Dividend Withholding Tax

Dividends distributed by us generally are subject to Dutch dividend withholding tax at a rate of 15%. Generally, we are responsible for the withholding of such dividend withholding tax at source; the Dutch dividend withholding tax is for the account of the holder of our common shares.

However, as long as we continue to have our place of effective management solely in Germany, and not in the Netherlands, under the double tax treaty between Germany and the Netherlands, we will be considered to be exclusively tax resident in Germany and we will not be required to withhold Dutch dividend withholding tax. This exemption from withholding does not apply to dividends distributed by us to a holder who is resident or deemed to be resident in the Netherlands for Dutch income tax purposes or to holders of common shares that are neither resident nor deemed to be resident of the Netherlands if the common shares are attributable to a Dutch permanent establishment of such non-resident holder, in which case the following paragraph applies. See also “Risk factors — If we do pay dividends, we may need to withhold tax on such dividends payable to holders of our shares in both Germany and the Netherlands.”

Dividends distributed by us to individuals and corporate legal entities who are resident or deemed to be resident in the Netherlands for Dutch income tax purposes (“Dutch Resident Individuals” and “Dutch Resident Entities,” as the case may be) or to holders of common shares that are neither resident nor deemed to be resident of the Netherlands if the common shares are attributable to a Dutch permanent establishment of such non-resident holder are subject to Dutch dividend withholding tax at a rate of 15%.

The expression “dividends distributed” includes, among other things:

- distributions in cash or in kind, deemed and constructive distributions and repayments of paid-in capital not recognized for Dutch dividend withholding tax purposes;
- liquidation proceeds, proceeds of redemption of common shares, or proceeds of the repurchase of common shares by us or one of our subsidiaries or other affiliated entities to the extent such proceeds exceed the average paid-in capital of those common shares as recognized for purposes of Dutch dividend withholding tax;
- an amount equal to the par value of common shares issued or an increase of the par value of common shares, to the extent that it does not appear that a related contribution, recognized for purposes of Dutch dividend withholding tax, has been made or will be made; and
- partial repayment of the paid-in capital, recognized for purposes of Dutch dividend withholding tax, if and to the extent that we have net profits (*zuivere winst*), unless (i) the general meeting has resolved in advance to make such repayment and (ii) the par value of the common shares concerned has been reduced by an equal amount by way of an amendment of our articles of association.

Dutch Resident Individuals and Dutch Resident Entities generally are entitled to an exemption or a credit for any Dutch dividend withholding tax against their income tax or corporate income tax liability and to a refund of any residual Dutch dividend withholding tax. The same generally applies to holders of common shares that are neither resident nor deemed to be resident of the Netherlands if the common shares are attributable to a Dutch permanent establishment of such non-resident holder.

Dividend stripping

Pursuant to legislation to counteract “dividend stripping,” a reduction, exemption, credit or refund of Dutch dividend withholding tax is denied if the recipient of the dividend is not the beneficial owner (*uiteindelijk gerechtigde*) of the dividend.

The Dutch Dividend Withholding Tax Act 1965 (*Wet op de dividendbelasting 1965*) provides for a non-exhaustive negative description of a beneficial owner. According to this act, a holder of common shares will not be considered the beneficial owner of the dividends if as a consequence of a combination of transactions:

- a person other than the holder of common shares wholly or partly, directly or indirectly, benefits from the dividends;
- whereby this other person retains or acquires, directly or indirectly, an interest similar to that in our common shares on which the dividends were paid; and
- that other person is entitled to a credit, reduction or refund of Dutch dividend withholding tax that is less than that of the holder of common shares.

The Dutch State Secretary of Finance takes the position that the definition of beneficial owner introduced by this legislation will also be applied in the context of a double taxation convention.

Taxes on Income and Capital Gains

Dutch Resident Entities

Generally speaking, if the holder of common shares is a Dutch Resident Entity, any benefits derived or deemed to be derived from the common shares or any gain or loss realized on the disposal or deemed disposal of the common shares is subject to Dutch corporate income tax at a rate of 16.5% with respect to taxable profits up to €200,000 and 25% with respect to taxable profits in excess of that amount (rates and brackets for 2020).

Dutch Resident Individuals

If the holder of common shares is a Dutch Resident Individual, any benefits derived or deemed to be derived from the common shares or any gain or loss realized on the disposal or deemed disposal of the common shares is taxable at the progressive Dutch income tax rates (with a maximum of 49.50% in 2020), if:

- (i) the common shares are attributable to an enterprise from which the holder of common shares derives a share of the profit, whether as an entrepreneur (*ondernemer*) or as a person who has a co-entitlement to the net worth (*medegerechtigd tot het vermogen*) of such enterprise without being a shareholder (as defined in the Dutch Income Tax Act 2001); or
- (ii) the holder of common shares is considered to perform activities with respect to the common shares that go beyond ordinary asset management (*normaal, actief vermogensbeheer*) or derives benefits from the common shares that are taxable as benefits from other activities (*resultaat uit overige werkzaamheden*).

If the above-mentioned conditions (i) and (ii) do not apply to the individual holder of common shares, such holder will be taxed annually on a deemed return (with a maximum of 5.28% in 2020) on the individual's net investment assets (*rendementsgrondslag*) for the year, insofar the individual's net investment assets for the year exceed a statutory threshold (*heffingvrij vermogen*). The deemed return on the individual's net investment assets for the year is taxed at a flat rate of 30%. Actual income, gains or losses in respect of the common shares are as such not subject to Dutch income tax.

The net investment assets for the year are the fair market value of the investment assets less the allowable liabilities on January 1 of the relevant calendar year. The common shares are included as investment assets. For the net investment assets on January 1, 2020, the deemed return ranges from 1.7893% up to 5.28% (depending on the aggregate amount of the net investment assets of the individual on January 1, 2020). The deemed return will be adjusted annually on the basis of historic market yields.

Non-residents of the Netherlands

A holder of common shares that is neither a Dutch Resident Entity nor a Dutch Resident Individual will not be subject to Dutch taxes on income or capital gains in respect of any payment under the common shares or in respect of any gain or loss realized on the disposal or deemed disposal of the common shares, provided that:

- (i) such holder does not have an interest in an enterprise or deemed enterprise (as defined in the Dutch Income Tax Act 2001 and the Dutch Corporate Income Tax Act 1969) which, in whole or in part, is either effectively managed in the Netherlands or carried on through a permanent establishment, a deemed permanent establishment or a permanent representative in the Netherlands and to which enterprise or part of an enterprise the common shares are attributable; and
- (ii) in the event the holder is an individual, such holder does not carry out any activities in the Netherlands with respect to the common shares that go beyond ordinary asset management and does not derive benefits from the common shares that are taxable as benefits from other activities in the Netherlands.

Gift and Inheritance Taxes

Residents of the Netherlands

Gift or inheritance taxes will arise in the Netherlands with respect to a transfer of common shares by way of a gift by, or on the death of, a holder of such common shares who is resident or deemed resident of the Netherlands at the time of the gift or the holder's death.

Non-residents of the Netherlands

No gift or inheritance taxes will arise in the Netherlands with respect to a transfer of common shares by way of gift by, or on the death of, a holder of common shares who is neither resident nor deemed to be resident of the Netherlands, unless:

- (i) in the case of a gift of common shares by an individual who at the date of the gift was neither resident nor deemed to be resident of the Netherlands, such individual dies within 180 days after the date of the gift, while being resident or deemed to be resident of the Netherlands; or
- (ii) the transfer is otherwise construed as a gift or inheritance made by, or on behalf of, a person who, at the time of the gift or death, is or is deemed to be resident of the Netherlands.

For purposes of Dutch gift and inheritance taxes, among others, a person that holds the Dutch nationality will be deemed to be resident of the Netherlands if such person has been resident in the Netherlands at any time during the ten (10) years preceding the date of the gift or such person's death. Additionally, for purposes of Dutch gift tax, amongst others, a person not holding the Dutch nationality will be deemed to be resident of the Netherlands if such person has been resident in the Netherlands at any time during the twelve (12) months preceding the date of the gift. Applicable tax treaties may override deemed residency.

Value Added Tax (VAT)

No Dutch VAT will be payable by a holder of common shares in respect of any payment in consideration for the holding or disposal of the common shares.

Other Taxes and Duties

No Dutch registration tax, stamp duty or any other similar documentary tax or duty will be payable by a holder of common shares in respect of any payment in consideration for the holding or disposal of the common shares.

Material German Tax Considerations

The following section is the opinion of FALK GmbH & Co KG ("German Tax Counsel") of the material German tax considerations that become relevant when purchasing, holding or transferring the company's shares. The company expects and intends to have its sole place of management in Germany and, therefore, qualifies as a corporation subject to German unlimited income taxation; however, because a company's tax residency depends on future facts regarding the location in which the company is managed and controlled, German Tax Counsel cannot opine as to whether the company will actually qualify as a

corporation subject to German unlimited income taxation. This section does not set forth all German tax aspects that may be relevant for shareholders. The section is based on the German tax law applicable as of the date of this Prospectus. It should be noted that the law may change following the issuance of this Prospectus and that such changes may have retroactive effect.

The material German tax principles of purchasing, owning and transferring of shares are set forth in the following. This section does not purport to be a comprehensive or complete analysis or listing of all potential tax effects of the purchase, ownership or disposition of shares and does not set forth all tax considerations that may be relevant to a particular person's decision to acquire common shares. All of the following is subject to change. Such changes could apply retroactively and could affect the consequences set forth below. This section does not refer to any U.S. Foreign Account Tax Compliance Act aspects.

Shareholders are advised to consult their own tax advisers with regard to the application of German tax law to their particular situations, in particular with respect to the procedure to be complied with to obtain a relief of withholding tax on dividends and on capital gains (*Kapitalertragsteuer*) and with respect to the influence of double tax treaty provisions, as well as any tax consequences arising under the laws of any state, local or other foreign jurisdiction. For German tax purposes, a shareholder may include an individual who or an entity that does not have the legal title to the shares, but to whom nevertheless the shares are attributed, based either on such individual or entity owning a beneficial interest in the shares or based on specific statutory provisions.

This section does not constitute a particular tax advice. Potential purchasers of the company's shares are urged to consult their own tax advisers regarding the tax consequences of the purchase, ownership and disposition of shares in light of their particular circumstances.

Dividends Tax

Withholding Tax on Dividends

Dividends distributed from a company to its shareholders are subject to withholding tax, subject to certain exemptions (for example, repayments of capital from the tax equity account (*steuerliches Einlagekonto*)), as described in the following. The withholding tax rate is 25% plus 5.5% solidarity surcharge (*Solidaritätszuschlag*) thereon (in total 26.375%) of the gross dividend approved by the ordinary shareholders' meeting. Withholding tax is to be withheld and passed on for the account of the shareholders by a domestic branch of a domestic or foreign credit or financial services institution (*Kredit- und Finanzdienstleistungsinstitut*), by the domestic securities trading company (*inländisches Wertpapierhandelsunternehmen*) or a domestic securities trading bank (*inländische Wertpapierhandelsbank*) which keeps and administers the shares and disburses or credits the dividends or disburses the dividends to a foreign agent, or by the securities custodian bank (*Wertpapiersammelbank*) to which the shares were entrusted for collective custody if the dividends are distributed to a foreign agent by such securities custodian bank (which is referred to as the "Dividend Paying Agent"). In case the shares are not held in collective deposit with a Dividend Paying Agent, the company is responsible for withholding and remitting the tax to the competent tax office.

Such withholding tax is levied and withheld irrespective of whether and to what extent the dividend distribution is taxable at the level of the shareholder and whether the shareholder is a person residing in Germany or in a foreign country.

In the case of dividends distributed to a company within the meaning of Art. 2 of the amended EU Directive 2011/96/EU of the Council of November 30, 2011 (the "EU Parent Subsidiary Directive") domiciled in another Member State of the European Union, an exemption from withholding tax will be granted upon request if further prerequisites are satisfied (*Freistellung im Steuerabzugsverfahren*). This also applies to dividends distributed to a permanent establishment located in another Member State of the European Union of such a parent company or of a parent company tax resident in Germany if the participation in the company is effectively connected with this permanent establishment. The key prerequisite for the application of the EU Parent Subsidiary Directive is that the shareholder has held a direct participation in the share capital of the company of at least 10% for at least one year.

The withholding tax on distributions to other foreign resident shareholders is reduced in accordance with a double taxation treaty if Germany has concluded such double taxation treaty with the country of residence of the shareholder and if the shareholder does not hold his shares either as part of the assets of a permanent establishment or a fixed place of business in Germany or as business assets for which a permanent representative has been appointed in Germany. The reduction of the withholding tax is procedurally granted in such a manner that the difference between the total amount withheld, including the solidarity surcharge, and the tax liability determined on the basis of the tax rate set forth in the applicable double taxation treaty (15% unless further qualifications are met) is refunded by the German tax administration upon request (Federal Central Office for Taxes (*Bundeszentralamt für Steuern*), main office in Bonn-Beuel, An der Kuppe 1, 53225 Bonn, Germany).

In the case of dividends received by corporations whose statutory seat and effective place of management are not located in Germany and who are therefore not tax resident in Germany, two-fifths of the withholding tax deducted and remitted are refunded without the need to fulfill all prerequisites required for such refund under the EU Parent Subsidiary Directive or under a double taxation treaty or if no double taxation treaty has been concluded between the state of residence of the shareholder.

In order to receive a refund pursuant to a double taxation treaty or the aforementioned option for foreign corporations, the shareholder has to submit a completed form for refund (available at the Federal Central Office for Taxes (<http://www.bzst.de>) as well as at the German embassies and consulates) together with a withholding tax certificate (*Kapitalertragsteuerbescheinigung*) issued by the institution that withheld the tax.

The exemption from withholding tax in accordance with the EU Parent Subsidiary Directive or a double tax treaty and the aforementioned options for a refund of the withholding tax (with or without protection under a double taxation treaty) depend on whether certain additional prerequisites (in particular so-called substance requirements) are fulfilled. The applicable withholding tax relief will only be granted if the preconditions of the German anti avoidance rules (so called Directive Override or Treaty Override), in particular Section 50d, paragraph 3, German Income Tax Act (*Einkommensteuergesetz*) are fulfilled. In addition, Article 28 of the Convention between the Federal Republic of Germany and the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital and to certain other Taxes of August 29, 1989 in the amended version of June 4, 2008 (*Bundesgesetzblatt II 2008*, p. 611) provides for further prerequisites that need to be fulfilled in case of a shareholder who is resident of the United States.

The aforementioned reductions of (or exemptions from) withholding tax are further restricted if (i) the applicable double taxation treaty provides for a tax reduction resulting in an applicable tax rate of less than 15% and (ii) the shareholder is not a corporation that directly holds at least 10% in the equity capital of the company and is subject to tax on its income and profits in its state of residence without being exempt. In this case, the reduction of (or exemption from) withholding tax is subject to the following three cumulative prerequisites: (i) the shareholder must qualify as beneficial owner of the shares in the company for a minimum holding period of 45 consecutive days occurring within a period of 45 days prior and 45 days after the due date of the dividends, (ii) the shareholder has to bear at least 70% of the change in value risk related to the shares in the company during the minimum holding period without being directly or indirectly hedged and (iii) the shareholder must not be required to fully or largely compensate directly or indirectly the dividends to third parties. However, these further prerequisites do not apply if the shareholder has been the beneficial owner of the shares in the company for at least one uninterrupted year upon receipt of the dividends.

For individual or corporate shareholders tax resident outside Germany not holding the shares through a permanent establishment (*Betriebsstätte*) in Germany or as business assets (*Betriebsvermögen*) for which a permanent representative (*ständiger Vertreter*) has been appointed in Germany, the remaining and paid withholding tax (if any) is final (i.e., not refundable) and settles the shareholder's limited tax liability in Germany. For individual or corporate shareholders tax resident in Germany (that are, for example, shareholders whose residence, domicile, registered office or place of management is located in Germany) holding their shares as business assets, as well as for shareholders tax resident outside of Germany holding their shares through a permanent establishment in Germany or as business assets for which a permanent representative has been appointed in Germany, the withholding tax withheld (including solidarity

surcharge) can be credited against the shareholder's personal income tax or corporate income tax liability in Germany. Any withholding tax (including solidarity surcharge) in excess of such tax liability is refunded. For individual shareholders tax resident in Germany holding the company's shares as private assets, the withholding tax is a final tax (*Abgeltungsteuer*), subject to the exceptions described in the following section.

Pursuant to special rules on the restriction of withholding tax credit, the credit of withholding tax is subject to the following three cumulative prerequisites: (i) the shareholder must qualify as beneficial owner of the shares in the company for a minimum holding period of 45 consecutive days occurring within a period of 45 days prior and 45 days after the due date of the dividends, (ii) the shareholder has to bear at least 70% of the change in value risk related to the shares in the company during the minimum holding period without being directly or indirectly hedged and (iii) the shareholder must not be required to fully or largely compensate directly or indirectly the dividends to third parties. Absent the fulfillment of all of the three prerequisites, three-fifths of the withholding tax imposed on the dividends must not be credited against the shareholder's (corporate) income tax liability, but may, upon application, be deducted from the shareholder's tax base for the relevant assessment period. A shareholder that has received gross dividends without any deduction of withholding tax due to a tax exemption without qualifying for a full tax credit has to notify the competent local tax office accordingly and has to make a payment in the amount of the omitted withholding tax deduction. The special rules on the restriction of withholding tax credit do not apply to a shareholder whose overall dividend earnings within an assessment period do not exceed €20,000 or that has been the beneficial owner of the shares in the company for at least one uninterrupted year upon receipt of the dividends.

Taxation of dividend income of shareholders tax resident in Germany holding the company's shares as private assets

For individual shareholders (individuals) resident in Germany holding the company's shares as private assets, dividends are subject to a flat tax rate which is satisfied by the withholding tax actually withheld (*Abgeltungsteuer*). Accordingly, dividend income will be taxed at a flat tax rate of 25% plus 5.5% solidarity surcharge thereon (in total 26.375%) and church tax (*Kirchensteuer*) in case the shareholder is subject to church tax because of his individual circumstances. An automatic procedure for deduction of church tax by way of withholding will apply to shareholders being subject to church tax unless the shareholder has filed a blocking notice (*Sperrvermerk*) with the German Federal Tax Office (details related to the computation of the concrete tax rate including church tax are to be discussed with the individual tax adviser of the relevant shareholder). Except for an annual lump sum savings allowance (*Sparer-Pauschbetrag*) of up to €801 (for individual filers) or up to €1,602 (for married couples and for partners in accordance with the registered partnership law (*Gesetz über die Eingetragene Lebenspartnerschaft*) filing jointly), private individual shareholders will not be entitled to deduct expenses incurred in connection with the capital investment from their dividend income.

The income tax owed for the dividend income is satisfied by the withholding tax withheld by the Dividend Paying Agent. However, if the flat tax results in a higher tax burden as opposed to the private shareholder's individual tax rate, the private shareholder can opt for taxation at his individual personal income tax rate. In that case, the final withholding tax will be credited against the income tax. However, pursuant to the German tax authorities and a court ruling, private shareholders are nevertheless not entitled to deduct expenses incurred in connection with the capital investment from their income. The option can be exercised only for all capital income from capital investments received in the relevant assessment period uniformly, and married couples as well as partners in accordance with the registered partnership law filing jointly may only jointly exercise the option.

Exceptions from the flat tax rate (satisfied by withholding at source) (*Abgeltungsteuer*) may apply — that is, only upon application — for shareholders who have a shareholding of at least 25% in a company and for shareholders who have a shareholding of at least 1% in the company and work for a company in a professional capacity. In such a case, the same rules apply as for sole proprietors holding the shares as business assets. See “— Taxation of dividend income of shareholders tax resident in Germany holding the company's shares as business assets — Sole proprietors.”

Taxation of dividend income of shareholders tax resident in Germany holding the company's shares as business assets

If a shareholder holds the company's shares as business assets, the taxation of the dividend income depends on whether the respective shareholder is a corporation, a sole proprietor or a partnership.

Corporations

Dividend income of corporate shareholders is exempt from corporate income tax, provided that the incorporated entity holds a direct participation of at least 10% in the share capital of a company at the beginning of the calendar year in which the dividends are paid. The acquisition of a participation of at least 10% in the course of a calendar year is deemed to have occurred at the beginning of such calendar year for the purpose of this rule. Participations in the share capital of the company which a corporate shareholder holds through a partnership, including co-entrepreneurships (*Mitunternehmerschaften*), are attributable to such corporate shareholder only on a pro rata basis at the ratio of the interest share of the corporate shareholder in the assets of the relevant partnership. However, 5% of the tax exempt dividends are deemed to be non-deductible business expenses for tax purposes and therefore are subject to corporate income tax (plus solidarity surcharge) and trade tax, i.e., tax exemption of 95%. Business expenses incurred in connection with the dividends received are entirely tax-deductible.

For trade tax purposes the entire dividend income is subject to trade tax (i.e., the tax-exempt dividends must be added back when determining the trade taxable income), unless the corporation shareholder holds at least 15% of the company's registered share capital at the beginning of the relevant tax assessment period (*Erhebungszeitraum*). In case of an indirect participation via a partnership please refer to the section "Partnerships" below.

If the shareholding is below 10% in the share capital, dividends are taxable at the applicable corporate income tax rate of 15% plus 5.5% solidarity surcharge thereon and trade tax (the rate of which depends on the municipalities the corporate shareholder resides in).

Special regulations apply which abolish the 95% tax exemption if the company's shares are held as trading portfolio assets in the meaning of Section 340e of the German commercial code (*Handelsgesetzbuch*) by (i) a credit institution (*Kreditinstitut*), (ii) a financial service institution (*Finanzdienstleistungsinstitut*) or (iii) a financial enterprise within the meaning of the German Banking Act (*Kreditwesengesetz*), in case more than 50% of the shares of such financial enterprise are held directly or indirectly by a credit institution or a financial service institution, as well as by a life insurance company, a health insurance company or a pension fund in case the shares are attributable to the capital investments, resulting in fully taxable income.

Sole proprietors

For sole proprietors (individuals) resident in Germany holding shares as business assets dividends are subject to the partial income rule (*Teileinkünfteverfahren*). Accordingly, only (i) 60% of the dividend income will be taxed at his/her individual personal income tax rate plus 5.5% solidarity surcharge thereon and church tax (if applicable) and (ii) 60% of the business expenses related to the dividend income are deductible for tax purposes. In addition, the dividend income is entirely subject to trade tax if the shares are held as business assets of a permanent establishment in Germany within the meaning of the German Trade Tax Act (*Gewerbesteuer-gesetz*), unless the shareholder holds at least 15% of the company's registered share capital at the beginning of the relevant assessment period. The trade tax levied will be eligible for credit against the shareholder's personal income tax liability based on the applicable municipal trade tax rate and the individual tax situation of the shareholder.

Partnerships

In case shares are held by a partnership, the partnership itself is not subject to corporate income tax or personal income tax. In this regard, corporate income tax or personal income tax (and church tax, if applicable) as well as solidarity surcharge, are levied only at the level of the partner with respect to their relevant part of the profit and depending on their individual circumstances.

If the partner is a corporation, the dividend income will be subject to corporate income tax plus solidarity surcharge. See “— Corporations.”

If the partner is a sole proprietor (individual), the dividend income will be subject to the partial income rule. See “— Sole Proprietors.”

The dividend income is subject to trade tax at the level of the partnership (provided that the partnership is liable to trade tax), unless the partnership holds at least 15% of a company’s registered share capital at the beginning of the relevant assessment period, in which case the dividend income is exempt from trade tax. There are no explicit statutory provisions concerning the taxation of dividends with regard to a corporate shareholder of the partnership. However, trade tax will be levied on 5% of the dividends to the extent they are attributable to the shares of such corporate partners to whom at least 10% of the shares of the company are attributable on a look-through basis, since such portion of the dividends will be deemed to be non-deductible business expenses.

If a partner is an individual, depending on the applicable municipal trade tax rate and the individual tax situation, the trade tax paid at the level of the partnership is partly or entirely be credited against the partner’s personal income tax liability.

In case of a corporation being a partner, special regulations will apply with respect to trading portfolio assets of credit institutions, financial service institutions or financial enterprises within the meaning of the German Banking Act (*Kreditwesengesetz*) or life insurance companies, health insurance companies or pension funds. See “— Corporations.”

Thus, the actual trade tax charge, if any, at the level of the partnership depends on the shareholding quota of the partnership and the nature of the partners (e.g., individual or corporation).

Taxation of dividend income of shareholders tax resident outside of Germany

For foreign individual or corporate shareholders tax resident outside of Germany not holding the shares through a permanent establishment in Germany or as business assets for which a permanent representative has been appointed in Germany, the deducted withholding tax (possibly reduced by way of a tax relief under a double tax treaty or domestic tax law, such as in connection with the EU Parent Subsidiary Directive) is final (that is, not refundable) and settles the shareholder’s limited tax liability in Germany, unless the shareholder is entitled to apply for a withholding tax refund or exemption.

In contrast, individual or corporate shareholders tax resident outside of Germany holding the company’s shares through a permanent establishment in Germany or as business assets for which a permanent representative has been appointed in Germany are subject to the same rules as applicable (and described above) to shareholders resident in Germany holding the shares as business assets. The withholding tax withheld (including solidarity surcharge) is credited against the shareholder’s personal income tax or corporate income tax liability in Germany.

Taxation of Capital Gains

Withholding tax on capital gains

Capital gains realized on the disposal of shares are only subject to withholding tax if a German branch of a German or foreign credit or financial institution, a German securities trading company or a German securities trading bank stores or administrates or carries out the sale of the shares and pays or credits the capital gains. In those cases, the institution (and not the company) is required to deduct the withholding tax at the time of payment for the account of the shareholder and has to pay the withholding tax to the competent tax authority. In case the shares in CureVac N.V. are held (i) as business assets by a sole proprietor, a partnership or a corporation and such shares are attributable to a German business or (ii) in case of a corporation being subject to unlimited corporate income tax liability in Germany, the capital gains are not subject to withholding tax. In case of clause (i), the withholding tax exemption is subject to the condition that the paying agent has been notified by the beneficiary (*Gläubiger*) that the capital gains are exempt from withholding tax. The respective notification has to be filed by using the officially prescribed form.

Taxation of Capital Gains Realized by Shareholders Tax Resident in Germany Holding Shares as Private Assets

For individual shareholders (individuals) resident in Germany holding shares as private assets, capital gains realized on the disposal of shares are subject to final withholding tax. Accordingly, capital gains will be taxed at a flat tax rate of 25% plus a 5.5% solidarity surcharge thereon (in total 26.375%) and church tax, in case the shareholder is subject to church tax because of his individual circumstances. An automatic procedure for deduction of church tax by way of withholding will apply to shareholders being subject to church tax unless the shareholder has filed a blocking notice (*Sperrvermerk*) with the German Federal Tax Office (details related to the computation of the concrete tax rate including church tax are to be discussed with the individual tax adviser of the relevant shareholder). The taxable capital gain is calculated by deducting the acquisition costs of the shares and the expenses directly related to the disposal from the proceeds of the disposal. Apart from that, except for an annual lump sum savings allowance (*Sparer-Pauschbetrag*) of up to €801 (for individual filers) or up to €1,602 (for married couples and for partners in accordance with the registered partnership law (*Gesetz über die Eingetragene Lebenspartnerschaft*) filing jointly), private individual shareholders will not be entitled to deduct expenses incurred in connection with the capital investment from their capital gain.

In case the flat tax results in a higher tax burden as opposed to the private shareholder's individual tax rate, the private shareholder can opt for taxation at his or her individual personal income tax rate. In that case, the withholding tax (including solidarity surcharge) withheld will be credited against the income tax. However, pursuant to the German tax authorities the private shareholders are nevertheless not entitled to deduct expenses incurred in connection with the capital investment from their income. The option can be exercised only for all capital income from capital investments received in the relevant assessment period uniformly, and married couples as well as for partners in accordance with the registered partnership law filing jointly may only jointly exercise the option.

Capital losses arising from the sale of the shares can only be offset against other capital gains resulting from the disposition of the shares or shares in other stock corporations during the same calendar year. Offsetting of overall losses with other income (such as business or rental income) and other capital income is not possible. Such losses are to be carried forward and to be offset against positive capital gains deriving from the sale of shares in stock corporations in future years. In case of a derecognition or transfer of worthless shares (or other capital assets), the utilization of such loss is further restricted and can only be offset up to the amount of EUR 10,000 per calendar year.

The final withholding tax will not apply if the seller of the shares or, in the case of gratuitous transfer, its legal predecessor has held, directly or indirectly, at least 1% of the company's registered share capital at any time during the five years prior to the disposal. In that case capital gains are subject to the partial income rule. Accordingly, only (i) 60% of the capital gains will be taxed at his individual personal income tax rate plus a 5.5% solidarity surcharge thereon and church tax (if applicable) and (ii) 60% of the business expenses related to the capital gains are deductible for tax purposes. The withholding tax withheld (including solidarity surcharge) will be credited against the shareholder's personal income tax liability in Germany.

Taxation of capital gains realized by shareholders tax resident in Germany holding the company's shares as business assets

If a shareholder holds shares as business assets, the taxation of capital gains realized on the disposal of such shares depends on whether the respective shareholder is a corporation, a sole proprietor or a partnership:

Corporations

Capital gains realized on the disposal of shares by a corporate shareholder are generally exempt from corporate income tax and trade tax. However, 5% of the tax-exempt capital gains are deemed to be non-deductible business expenses for tax purposes and therefore are subject to corporate income tax (plus solidarity surcharge) and trade tax, i.e., tax exemption of 95%. Business expenses incurred in connection with the capital gains are entirely tax-deductible.

Capital losses incurred upon the disposal of shares or other impairments of the share value are not tax-deductible. A reduction of profit is also defined as any losses incurred in connection with a loan or security in the event the loan or the security is granted by a shareholder or by a related party thereto or by a third person with the right of recourse against the before-mentioned persons, and the shareholder holds directly or indirectly more than 25% of the company's registered share capital.

Special regulations apply if the shares are held as trading portfolio assets by a credit institution, a financial service institution or a financial enterprise within the meaning of the German Banking Act (*Kreditwesengesetz*) as well as by a life insurance company, a health insurance company or a pension fund. See “— Taxation of dividend income of shareholders tax resident in Germany holding the company's shares as business assets — Corporations.”

Sole Proprietors

If the shares are held by a sole proprietor, capital gains realized on the disposal of the shares are subject to the partial income rule. Accordingly, only (i) 60% of the capital gains will be taxed at his/her individual personal income tax rate plus a 5.5% solidarity surcharge thereon and church tax (if applicable) and (ii) 60% of the business expenses related to the dividend income are deductible for tax purposes. In addition, 60% of the capital gains are subject to trade tax if the shares are held as business assets of a permanent establishment in Germany within the meaning of the German Trade Tax Act (*Gewerbsteuergesetz*). The trade tax levied, depending on the applicable municipal trade tax rate and the individual tax situation, is partly or entirely credited against the shareholder's personal income tax liability.

Partnerships

In case the shares are held by a partnership, the partnership itself is not subject to corporate income tax or personal income tax as well as a solidarity surcharge (and church tax) since partnerships qualify as transparent for German tax purposes. In this regard, corporate income tax or personal income tax as well as a solidarity surcharge (and church tax, if applicable), are levied only at the level of the partner with respect to their relevant part of the profit and depending on their individual circumstances.

If the partner is a corporation, the capital gains will be subject to corporate income tax plus a solidarity surcharge. See “— Corporations.” Trade tax will be levied additionally at the level of the partner insofar as the relevant profit of the partnership is not subject to trade tax at the level of the partnership. However, with respect to both corporate income and trade tax, the 95% exemption rule as described above applies.

If the partner is a sole proprietor (individual), the capital gains are subject to the partial income rule. See “— Sole Proprietors.”

In addition, if the partnership is liable to trade tax, 60% of the capital gains are subject to trade tax at the level of the partnership, to the extent the partners are individuals, and 5% of the capital gains are subject to trade tax, to the extent the partners are corporations. However, if a partner is an individual, depending on the applicable municipal trade tax rate and the individual tax situation, the trade tax paid at the level of the partnership is credited against the partner's personal income tax liability.

With regard to corporate partners, special regulations apply if they are held as trading portfolio assets by credit institutions, financial service institutions or financial enterprises within the meaning of the German Banking Act or life insurance companies, health insurance companies or pension funds, as described above.

Taxation of capital gains realized by shareholders tax resident outside of Germany

Capital gains realized on the disposal of the shares by a shareholder tax resident outside of Germany are subject to German taxation provided that (i) the company's shares are held as business assets of a permanent establishment or as business assets for which a permanent representative has been appointed in Germany, or (ii) the shareholder or, in case of a gratuitous transfer, its legal predecessor has held, directly or indirectly, at least 1% of the company's shares capital at any time during a five-year period prior to the disposal. In these cases, capital gains are generally subject to the same rules as described above for

shareholders resident in Germany. However, in case the shares are not attributable to a German permanent establishment or permanent representative the 5% taxation (see “— Corporations — Taxation of capital gains realized by shareholders tax resident in Germany holding the company’s shares as business assets”) shall not apply and the capital gains are fully exempt from German tax.

However, except for the cases referred to in clause (i) above, some of the double tax treaties concluded with Germany provide for a full exemption from German taxation.

Inheritance and Gift Tax

The transfer of the company’s shares to another person by way of succession or donation is subject to German inheritance and gift tax (*Erbschaft- und Schenkungsteuer*) if:

- (i) the decedent, the donor, the heir, the donee or any other beneficiary has his/her/its residence, domicile, registered office or place of management in Germany at the time of the transfer, or is a German citizen who has not stayed abroad for more than five consecutive years without having a residence in Germany; or
- (ii) (irrespective of the personal circumstances) the shares are held by the decedent or donor as business assets for which a permanent establishment in Germany is maintained or a permanent representative is appointed in Germany; or
- (iii) (irrespective of the personal circumstances) at least 10% of the shares are held, directly or indirectly by, the decedent or person making the gift, himself or together with a related party in terms of Section 1 para. 2 Foreign Tax Act (*Außensteuergesetz*).

Special regulations apply to qualified German citizens who maintain neither a residence nor their domicile in Germany but in a low tax jurisdiction, and to former German citizens, also resulting in inheritance and gift tax. The few double tax treaties on inheritance and gift tax which Germany has entered into provide that German inheritance and gift tax is levied only in case of (i) and, with certain restrictions, in case of (ii).

Abolishment of Solidarity Surcharge

According to a bill enacted in December 2019, the solidarity surcharge will be partially abolished as of the assessment period 2021 for certain individuals. The solidarity surcharge shall, however, continue to apply for capital investment and, thus, on withholding taxes levied. In case the individual income tax burden for an individual shareholder is lower than 25%, the shareholder can apply for his/her capital investment income being assessed at his/her individual tariff-based income tax rate, in which case solidarity surcharge would be refunded.

Other Taxes

No German capital transfer tax (*Kapitalverkehrsteuer*), value-added tax (*Umsatzsteuer*), stamp duty (*Stempelgebühr*) or similar taxes are levied when acquiring, holding or transferring the company’s shares. No value-added tax will be levied unless the shareholder validly opts for it. Net wealth tax (*Vermögensteuer*) is currently not levied in Germany.

On January 22, 2013, the Council of the European Union approved the resolution of the ministers of finance from 11 European Union member states (including Germany) to introduce a Financial Transaction Tax (“FTT”) within the framework of enhanced cooperation. On February 14, 2013, the European Commission published a proposal for a Council Directive implementing enhanced cooperation in the area of financial transaction tax. The plan focuses on levying a tax of 0.1% (0.01% for derivatives) on the purchase and sale of financial instruments.

A joint statement issued by 10 of the 11 participating European Union member states in October 2016 reaffirmed the intention to introduce FTT. However, at the moment not many details are available. Recently, further discussions on an FTT on the basis of a draft provided by Germany were held. However, it is still unclear if and when the FTT will be implemented and what the exact scope will be. The

FTT proposal remains subject to negotiation between the participating Member States and is subject to political discussion. It may, therefore, be altered prior to the implementation, the timing of which remains unclear. Additional European Union member states may decide to participate.

Prospective holders of the shares are advised to seek their own professional advice in relation to FTT.

Material U.S. Federal Income Tax Considerations to U.S. Holders

In the opinion of Davis Polk & Wardwell LLP, the following is a description of the material U.S. federal income tax consequences to the U.S. Holders, as defined below, of owning and disposing of our common shares. It does not describe all tax considerations that may be relevant to a particular person's decision to acquire common shares.

This discussion applies only to a U.S. Holder that holds common shares as capital assets for U.S. federal income tax purposes. In addition, it does not describe all of the U.S. federal income tax consequences that may be relevant in light of the U.S. Holder's particular circumstances, including alternative minimum tax consequences, the potential application of the provisions of the Code known as the Medicare contribution tax and tax consequences applicable to U.S. Holders subject to special rules, such as:

- certain financial institutions;
- dealers or traders in securities who use a mark-to-market method of tax accounting;
- persons holding common shares as part of a hedging transaction, straddle, wash sale, conversion transaction or other integrated transaction or persons entering into a constructive sale with respect to the common shares;
- persons whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
- entities classified as partnerships for U.S. federal income tax purposes;
- tax-exempt entities, including an "individual retirement account" or "Roth IRA";
- persons that own or are deemed to own ten percent or more of our common shares (by vote or value); or
- persons holding common shares in connection with a trade or business conducted outside of the United States.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds common shares, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding common shares and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of owning and disposing of the common shares.

This discussion is based on the Code, administrative pronouncements, judicial decisions, final, temporary and proposed Treasury regulations, and the income tax treaty between the Federal Republic of Germany and the United States, or the Treaty, all as of the date hereof, any of which is subject to change or differing interpretations, possibly with retroactive effect.

A "U.S. Holder" is a holder who, for U.S. federal income tax purposes, is a beneficial owner of our common shares, who is eligible for the benefits of the Treaty and who is:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust, the income of which is subject to U.S. federal income taxation regardless of its source.

U.S. Holders should consult their tax advisers concerning the U.S. federal, state, local and non-U.S. tax consequences of owning and disposing of our common shares in their particular circumstances.

Taxation of Distributions

As discussed above under “Dividend Policy” we have never paid or declared any cash dividends on our common shares, and we do not anticipate paying any cash dividends on our common shares in the foreseeable future. In the event that we do make distributions of cash or other property, subject to the passive foreign investment company rules described below, distributions paid on common shares, other than certain pro rata distributions of common shares, will generally be treated as dividends to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Because we do not maintain calculations of our earnings and profits under U.S. federal income tax principles, we expect that distributions generally will be reported to U.S. Holders as dividends. For so long as our common shares are listed on the Nasdaq or another established securities market in the United States or we are eligible for benefits under the Treaty, dividends paid to certain non-corporate U.S. Holders may be eligible for taxation as “qualified dividend income” and therefore, subject to applicable limitations, taxable at rates not in excess of the long-term capital gain rate applicable to such U.S. Holders. U.S. Holders should consult their tax advisers regarding the availability of the reduced tax rate on dividends in their particular circumstances. The amount of a dividend will include any amounts withheld by us in respect of German income taxes. The amount of the dividend will be treated as foreign-source dividend income to U.S. Holders and will not be eligible for the dividends-received deduction generally available to U.S. corporations under the Code. Dividends will be included in a U.S. Holder’s income on the date of the U.S. Holder’s receipt of the dividend. The amount of any dividend income paid in euros will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of actual or constructive receipt, regardless of whether the payment is in fact converted into U.S. dollars at that time. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder should not be required to recognize foreign currency gain or loss in respect of the dividend income. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt.

Subject to applicable limitations, some of which vary depending upon the U.S. Holder’s particular circumstances, German income taxes withheld from dividends on common shares at a rate not exceeding the rate provided by the Treaty will be creditable against the U.S. Holder’s U.S. federal income tax liability. German taxes withheld in excess of the rate applicable under the Treaty will not be eligible for credit against a U.S. Holder’s federal income tax liability. The rules governing foreign tax credits are complex, and U.S. Holders should consult their tax advisers regarding the creditability of foreign taxes in their particular circumstances. In lieu of claiming a foreign tax credit, U.S. Holders may, at their election, deduct foreign taxes, including any German income tax, in computing their taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year.

Sale or Other Disposition of Common Shares

Subject to the passive foreign investment company rules described below, gain or loss realized on the sale or other disposition of common shares will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the common shares for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder’s tax basis in the common shares disposed of and the amount realized on the disposition, in each case as determined in U.S. dollars. This gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. The deductibility of capital losses is subject to various limitations. The Treaty generally exempts a U.S. Holder from German tax on capital gains realized on the sale or other disposition of common shares and, accordingly, no such tax will be creditable against the U.S. Holder’s U.S. federal income tax liability.

Passive Foreign Investment Company Rules

Under the Code, we will generally be a PFIC for any taxable year in which, after the application of certain “look-through” rules with respect to subsidiaries, either (i) 75% or more of our gross income consists of “passive income,” or (ii) 50% or more of the average quarterly value of our assets consist of assets that produce, or are held for the production of, “passive income.” For purposes of the above calculations, we will be treated as if we hold our proportionate share of the assets of, and receive directly our proportionate share of the income of, any other corporation in which we directly or indirectly own at least

25%, by value, of the shares of such corporation. Passive income generally includes dividends, interest, rents, certain non-active royalties and capital gains. The value of a non-U.S. corporation's goodwill that is associated with activities that produce or are intended to produce active income is generally an active asset for purposes of the asset test unless, for U.S. federal income tax purposes, the non-U.S. corporation is a "controlled foreign corporation" (CFC) that is not publicly traded "for the taxable year." If a non-U.S. corporation is a CFC that is not publicly traded for the taxable year, its PFIC status under the asset test is determined by using the U.S. tax basis of its assets rather than their fair market value and therefore the market value of its goodwill is generally disregarded. Generally, a non-U.S. corporation is a CFC if more than 50% of its shares' voting power or value is owned, directly, indirectly or constructively, by "United States shareholders" (as defined in Section 951(b) of the Code). Although it is not certain, we may be or may have been a CFC in the current taxable year. However, under the Proposed Regulations, the fair market value of our assets (including goodwill) can be used for purposes of the asset test provided that (i) we are publicly traded on the majority of days during our taxable year or (ii) we would not be a CFC if certain constructive ownership rules were not applied. Although no assurances may be given in this regard, we expect that we would be eligible in our 2020 taxable year to use the fair market value of our assets for purposes of the asset test, and U.S. investors are urged to consult their tax advisers whether they could apply the Proposed Regulations for purposes of the asset test. The remainder of this discussion assumes that U.S. Holders will choose to apply the Proposed Regulations in their entirety.

Based on the composition of our income and assets during 2019, we do not believe that we were a PFIC for our 2019 taxable year. However, PFIC status is a fact-intensive determination made on an annual basis after the end of each taxable year, and we have not yet determined our expected PFIC status for the current taxable year or any future taxable year. Whether we will be a PFIC in 2020 or any future year is uncertain because, among other things, (i) we currently own, and will own after the closing of this offering, a substantial amount of passive assets, including cash, (ii) the valuation of our assets that generate non-passive income for PFIC purposes, including our intangible assets, is uncertain and may vary substantially over time, (iii) the treatment of grants as income for U.S. federal income tax purposes is unclear, and (iv) the composition of our income may vary substantially over time. Accordingly, there can be no assurance that we will not be a PFIC in 2020 or any future taxable year. If we are a PFIC for any year during which a U.S. Holder holds common shares, we generally would continue to be treated as a PFIC with respect to that U.S. Holder for all succeeding years during which the U.S. Holder holds common shares, even if we ceased to meet the threshold requirements for PFIC status. In addition, we may, directly or indirectly, have held or hold equity interests in other PFICs (collectively, "Lower-tier PFICs"). Under attribution rules, if we are a PFIC, U.S. Holders will be deemed to own their proportionate shares of the stock of Lower-tier PFICs and will be subject to U.S. federal income tax according to the rules described in the following paragraphs on (i) certain distributions by a Lower-tier PFIC and (ii) a disposition of shares of a Lower-tier PFIC, in each case as if the U.S. Holder held such shares directly, even though holders have not received the proceeds of those distributions or dispositions directly. U.S. Holders should consult their tax advisors about the consequences to them of our investment in one or more Lower-tier PFICs.

If we were a PFIC for any taxable year during which a U.S. Holder held common shares (assuming such U.S. Holder has not made a timely mark-to-market election, as described below), gain recognized by a U.S. Holder on a sale or other disposition (including certain pledges) of the common shares would be allocated ratably over the U.S. Holder's holding period for the common shares. The amounts allocated to the taxable year of the sale or other disposition and to any year before we became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations, as appropriate, for that taxable year, and an interest charge would be imposed on the amount allocated to that taxable year. Further, to the extent that any distribution received by a U.S. Holder on its common shares exceeds 125% of the average of the annual distributions on the common shares received during the preceding three years or the U.S. Holder's holding period, whichever is shorter, that distribution would be subject to taxation in the same manner as gain, described immediately above.

A U.S. Holder can avoid certain of the adverse rules described above by making a mark-to-market election with respect to its common shares, provided that the common shares are "marketable." Common shares will be marketable if they are "regularly traded" on a "qualified exchange" or other market within the meaning of applicable Treasury regulations. If a U.S. Holder makes the mark-to-market election, it

generally will recognize as ordinary income any excess of the fair market value of the common shares at the end of each taxable year over their adjusted tax basis, and will recognize an ordinary loss in respect of any excess of the adjusted tax basis of the common shares over their fair market value at the end of the taxable year (but only to the extent of the net amount of income previously included as a result of the mark-to-market election). If a U.S. Holder makes the election, the U.S. Holder's tax basis in our common shares will be adjusted to reflect the income or loss amounts recognized. Any gain recognized on the sale or other disposition of common shares in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as an ordinary loss (but only to the extent of the net amount of income previously included as a result of the mark-to-market election). A mark-to-market election generally cannot be made for equity interests in any Lower-tier PFIC unless shares of such Lower-tier PFIC are themselves "marketable." As a result, if a U.S. Holder makes a mark-to-market election with respect to our common shares, the U.S. Holder would nevertheless be subject to the PFIC rules described above with respect to its indirect interest in any Lower-tier PFIC unless the U.S. Holder makes a QEF Election with respect to such Lower-tier PFIC, as discussed below.

In addition, in order to avoid the application of the foregoing rules, a U.S. Holder that owns stock in a PFIC for U.S. federal income tax purposes may make a QEF Election with respect to such PFIC if the PFIC provides the information necessary for such election to be made. If a U.S. Holder makes a QEF Election with respect to a PFIC, the United States person will be currently taxable on its pro rata share of the PFIC's ordinary earnings and net capital gain (at ordinary income and capital gain rates, respectively) for each taxable year that the entity is classified as a PFIC and will not be required to include such amounts in income when actually distributed by the PFIC. There is no assurance that we will provide information necessary for U.S. Holders to make QEF Elections. A QEF Election with respect to us will not apply to any Lower-tier PFIC. If we determine that any of our subsidiaries is a Lower-tier PFIC for any taxable year, there is no assurance that we will provide information necessary for U.S. Holders to make a QEF Election with respect to such Lower-tier PFIC.

In addition, if we were a PFIC or, with respect to a particular U.S. Holder, were treated as a PFIC for the taxable year in which we paid a dividend or for the prior taxable year, the preferential dividend rates discussed above with respect to dividends paid to certain non-corporate U.S. Holders would not apply.

If a U.S. Holder owns common shares during any year in which we are a PFIC, the U.S. Holder generally must file annual reports, containing such information as the U.S. Treasury may require on IRS Form 8621 (or any successor form) with respect to us, generally with the U.S. Holder's federal income tax return for that year.

U.S. Holders should consult their tax advisers concerning our potential PFIC status and the potential application of the PFIC rules.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the IRS.

UNDERWRITING

BofA Securities, Inc., Jefferies LLC and Credit Suisse Securities (USA) LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of common shares set forth opposite its name below.

Underwriter	Number of Shares
BofA Securities, Inc.	
Jefferies LLC	
Credit Suisse Securities (USA) LLC	
Kempen & Co U.S.A., Inc	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed. Sales of shares may be made through one or more affiliates or selling agents of the underwriters.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	\$	\$	\$
Underwriting discount	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The expenses of the offering, not including the underwriting discount, are estimated at \$ and are payable by us. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to \$25,000.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting

discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and substantially all of our directors and our other existing security holders have agreed not to sell or transfer any common shares or securities convertible into, exchangeable for, exercisable for, or repayable with common shares, for 180 days after the date of this prospectus without first obtaining the written consent of BofA Securities, Inc. and Jefferies LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell or contract to sell any common shares;
- sell any option or contract to purchase any common shares;
- purchase any option or contract to sell any common shares;
- grant any option, right or warrant for the sale of any common shares;
- lend or otherwise dispose of or transfer any common shares;
- request or demand that we file or make a confidential submission of a registration statement related to the common shares; or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common shares whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common shares and to securities convertible into or exchangeable or exercisable for or repayable with common shares. It also applies to common shares owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Nasdaq Global Market Listing

We expect the shares to be approved for listing on The Nasdaq Global Market, subject to notice of issuance, under the symbol "CVAC."

Before this offering, there has been no public market for our common shares. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters from bidding for and purchasing our common shares. However, the representatives may engage in transactions that stabilize the price of the common shares, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common shares in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common shares made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common shares or preventing or retarding a decline in the market price of our common shares. As a result, the price of our common shares may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on The Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common shares. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Stamp Taxes

If you purchase common shares offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the

accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Directed Share Program

At our request, the underwriters have reserved up to common shares, or % of common shares to be offered by this prospectus for sale, at the initial public offering price, through a directed share program. Common shares purchased through the directed share program will not be subject to a lock-up restriction, except in the case of common shares purchased by any of our directors or officers. We do not know if any of these potential investors will choose to purchase all or any portion of the allocated shares, but the number of common shares available for sale to the general public will be reduced to the extent these individuals or entities purchase such reserved common shares. Any reserved common shares that are not so purchased will be offered by the underwriters to the general public on the same basis as the other common shares offered by this prospectus. The underwriters will receive the same discount from such reserved common shares as they will from other common shares of our common shares sold to the public in this offering. We have agreed to indemnify the underwriters against certain liabilities and expenses, including liabilities under the Securities Act, in connection with sales of the reserved shares.

Notice to Prospective Investors in the European Economic Area and the United Kingdom

In relation to each Member State of the European Economic Area and the United Kingdom (each a “Relevant State”), no shares have been offered or will be offered to the public in that Relevant State in connection with this offering prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved by the competent authority in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- a. to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- b. to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the representatives of the underwriters named above for any such offer; or
- c. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any representatives of the underwriters named above to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation. Neither we nor the representatives of the underwriters named above have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for us or the underwriters to publish a prospectus for such offer pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Relevant State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with our company and the representatives of the underwriters named above that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed to and with our company and the representatives of the underwriters named above that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of shares to the public other than their offer or resale in a Relevant State to qualified

investors within the meaning of the Prospectus Regulation, in circumstances in which the prior consent of the representatives of the underwriters named above has been obtained to each such proposed offer or resale.

We, the representatives of the underwriters named above and our and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this selling restriction, the expression an “offer to the public” in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

References to the Prospectus Regulation include, in relation to the United Kingdom (and its constituent countries), the Prospectus Regulation as it forms part of the domestic law of the constituent countries of the United Kingdom by virtue of the European Union (Withdrawal) Act 2018.

This selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Financial Promotion Order”), (ii) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended (“FSMA”)) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Notice to Prospective Investors in Switzerland

This prospectus is not intended to constitute an offer or solicitation to purchase or invest in our Common Shares. The Common Shares may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act (“FinSA”) and no application has or will be made to admit the Common Shares to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this prospectus nor any other offering or marketing material relating to the Common Shares constitutes a prospectus pursuant to the FinSA, and neither this prospectus nor any other offering or marketing material relating to the Common Shares may be publicly distributed or otherwise made publicly available in Switzerland.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (“DFSA”). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (“ASIC”), in relation to the

offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the “Corporations Act”), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the “Exempt Investors”) who are “sophisticated investors” (within the meaning of section 708(8) of the Corporations Act), “professional investors” (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, “Japanese Person” shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the shares were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the “SFA”)) pursuant to Section 274 of the SFA,

(ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (b) where no consideration is or will be given for the transfer;
- (c) where the transfer is by operation of law; or
- (d) as specified in Section 276(7) of the SFA.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Germany

Our common shares may be offered and sold in the Federal Republic of Germany only in compliance with the Prospectus Regulation, the Commission Delegated Regulations (EU) 2019/979 and (EU) 2019/980, each as of March 14, 2019 and the German Securities Prospectus Act (*Wertpapierprospektgesetz*), as amended, or any other laws applicable in Germany governing the issue, offering and sale of securities. This prospectus has not been approved under the Prospectus Regulation and, accordingly, our common shares may not be offered publicly in the Federal Republic of Germany. Our common shares will be offered in the Federal Republic of Germany in reliance on an exemption from the requirement to publish an approved securities prospectus under the Prospectus Regulation. Any resale of our common shares in Germany may

only be made in accordance with the Prospectus Regulation and other applicable laws. We have not filed, and do not intend to file, a securities prospectus with the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht, "BaFin"*) or obtain a notification to BaFin from another competent authority of a member state of the European Economic Area, with which a securities prospectus may have been filed, pursuant to Article 24 Para. 1 of the Prospectus Regulation.

Notice to Prospective Investors in the State of Israel

In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of common stock under the Israeli Securities Law, 5728-1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728-1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions (the "Addressed Investors"); or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728-1968, subject to certain conditions (the "Qualified Investors"). The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728-1968. We have not and will not distribute this prospectus or make, distribute or direct an offer to subscribe for our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

EXPENSES OF THE OFFERING

We estimate that our expenses in connection with this offering, other than underwriting discounts and commissions, will be as follows:

Expenses	Amount
U.S. Securities and Exchange Commission registration fee	\$ 12,980
Nasdaq listing fee	\$ 25,000
FINRA filing fee	*
Printing and engraving expenses	\$ 250,000
Legal fees and expenses	*
Accounting fees and expenses	*
Miscellaneous costs	*
Total	*

* To be provided by amendment.

All amounts in the table are estimates except the U.S. Securities and Exchange Commission registration fee, the Nasdaq listing fee and the FINRA filing fee. We will pay all of the expenses of this offering.

LEGAL MATTERS

The validity of the common shares and certain other matters of Dutch law will be passed upon for us by NautaDutilh N.V. Certain matters of U.S. federal law will be passed upon for us by Davis Polk & Wardwell LLP. Certain matters will be passed upon for the underwriters by Latham & Watkins LLP, New York, New York, with respect to U.S. federal law, and De Brauw Blackstone Westbroek N.V., with respect to Dutch law.

EXPERTS

The consolidated financial statements of CureVac AG as of December 31, 2018 and 2019, and for each of the two years in the period ended December 31, 2019, appearing in this prospectus and registration statement, have been audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, an independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The current address of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft is Arnulfstraße 59, 80636 Munich, Germany.

ENFORCEMENT OF JUDGMENTS

We are incorporated under the laws of the Netherlands, and our headquarters are located in Germany. Substantially all of our assets are located outside the United States. The majority of our managing directors and supervisory directors reside outside the United States. As a result, it may not be possible for investors to effect service of process within the United States upon such persons or to enforce against them or us in U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States.

There is currently no treaty between the United States and the Netherlands for the mutual recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the U.S. federal securities laws, would not be enforceable in the Netherlands unless the underlying claim is relitigated before a Dutch court of competent jurisdiction. Under current practice, however, a Dutch court will generally, subject to compliance with certain procedural requirements, grant the same judgment without a review of the merits of the underlying claim if such judgment (i) is a final judgment and has been rendered by a court, which has established its jurisdiction vis-à-vis the relevant Dutch companies or Dutch company, as the case may be, on the basis of internationally accepted grounds of jurisdiction, (ii) has not been rendered in violation of principles of proper procedure (*behoorlijke rechtspleging*), (iii) is not contrary to the public policy of the Netherlands, and (iv) is not incompatible with (a) a prior judgment of a Dutch court rendered in a dispute between the same parties, or (b) a prior judgment of a foreign court rendered in a dispute between the same parties, concerning the same subject matter and based on the same cause of action, provided that such prior judgment is capable of being recognized in the Netherlands and except to the extent that the foreign judgment contravenes Dutch public policy (*openbare orde*). Dutch courts may deny the recognition and enforcement of punitive damages or other awards. Moreover, a Dutch court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages. Enforcement and recognition of judgments of U.S. courts in the Netherlands are solely governed by the provisions of the Dutch Code of Civil Procedure. Based on the foregoing, there can be no assurance that U.S. investors will be able to enforce any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

The United States and Germany currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments, in civil and commercial matters. Consequently, a final judgment for payment or declaratory judgments given by a court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in Germany. German courts may deny the recognition and enforcement of a judgment rendered by a U.S. court if they consider the U.S. court not to be competent or the decision to be in violation of German public policy principles. For example,

judgments awarding punitive damages are generally not enforceable in Germany. A German court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages.

In addition, actions brought in a German court against us, our management board and supervisory board and the experts named herein to enforce liabilities based on U.S. federal securities laws may be subject to certain restrictions. In particular, German courts generally do not award punitive damages. Litigation in Germany is also subject to rules of procedure that differ from the U.S. rules, including with respect to the taking and admissibility of evidence, the conduct of the proceedings and the allocation of costs. German procedural law does not provide for pre-trial discovery of documents, nor does Germany support pre-trial discovery of documents under the 1970 Hague Evidence Convention. Proceedings in Germany would have to be conducted in the German language and all documents submitted to the court would, in principle, have to be translated into German. For these reasons, it may be difficult for a U.S. investor to bring an original action in a German court predicated upon the civil liability provisions of the U.S. federal securities laws against us, our management board and supervisory board and the experts named in this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the U.S. Securities and Exchange Commission a registration statement (including amendments and exhibits to the registration statement) on Form F-1 under the Securities Act. This prospectus, which is part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. For further information, we refer you to the registration statement and the exhibits and schedules filed as part of the registration statement. If a document has been filed as an exhibit to the registration statement, we refer you to the copy of the document that has been filed. Each statement in this prospectus relating to a document filed as an exhibit is qualified in all respects by the filed exhibit.

Upon completion of this offering, we will become subject to the informational requirements of the Exchange Act. Accordingly, we will be required to file reports and other information with the SEC, including annual reports on Form 20-F and reports on Form 6-K. The SEC maintains an Internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, the rules prescribing the furnishing and content of proxy statements, and our executive officers, managing directors, supervisory directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

We will send the transfer agent a copy of all notices of shareholders' meetings and other reports, communications and information that are made generally available to shareholders. The transfer agent has agreed to mail to all shareholders a notice containing the information (or a summary of the information) contained in any notice of a meeting of our shareholders received by the transfer agent and will make available to all shareholders such notices and all such other reports and communications received by the transfer agent.

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CureVac AG
Interim Condensed Consolidated Statements of Operations and
Other Comprehensive Income (Loss)

	Note	Three months ended March 31,	
		2019	2020
(in thousands of EUR, except per share data)			
		(unaudited)	
Revenue		3,156	3,119
Cost of sales	3.2	(7,558)	(5,475)
Selling and distribution expenses	3.3	(198)	(330)
Research and development expenses	3.4	(10,862)	(10,902)
General and administrative expenses	3.5	(6,887)	(11,495)
Other operating income	3.6	732	1,995
Other operating expenses		(108)	(127)
Operating loss		(21,725)	(23,216)
Finance income		649	1,041
Finance expenses		(90)	(1,719)
Loss before income tax		(21,166)	(23,894)
Income tax benefit / (expense)		(142)	44
Net loss for the period		(21,308)	(23,850)
Other comprehensive income:			
<i>Items that may be subsequently reclassified to profit or loss</i>			
Foreign currency adjustments		36	48
Total comprehensive loss for the period		(21,272)	(23,802)
Net loss per share (basic and diluted)		(29.32)	(32.48)

The accompanying notes are an integral part of these condensed consolidated financial statements.

CureVac AG

Interim Condensed Consolidated Statements of Financial Position

(in thousands of EUR)	Note	As at	
		December 31, 2019	March 31, 2020 (unaudited)
Assets			
Non-current assets			
Intangible assets		5,698	6,120
Property, plant and equipment	6.1	48,075	50,356
Right-of-use assets	8	13,611	36,876
Other assets	6.2	6,061	2,027
Deferred tax assets		—	169
Total non-current assets		73,445	95,548
Current assets			
Inventories	9	6,197	5,425
Trade receivables	3	15,690	2,410
Contract assets	3	1,463	2,422
Other financial assets	10	1,458	1,418
Prepaid expenses and other assets	7	1,683	4,959
Cash and cash equivalents		30,684	43,474
Total current assets		57,175	60,108
Total assets		130,620	155,656
Equity and liabilities			
Equity			
Issued capital	4	727	743
Capital reserve	4, 5	472,396	495,327
Accumulated deficit		(515,947)	(539,797)
Other comprehensive income		22	70
Total equity		(42,802)	(43,657)
Non-current liabilities			
Convertible loans	11	65,018	67,078
Lease liabilities	8	12,126	29,320
Contract liabilities	3	66,040	64,002
Deferred tax liabilities		1,623	1,636
Other liabilities		529	784
Total non-current liabilities		145,336	162,820
Current liabilities			
Lease liabilities	8	2,004	3,088
Trade and other payables		6,475	6,078
Other liabilities	3.6	12,015	19,453
Income taxes payable	12	111	226
Contract liabilities	3	7,481	7,648
Total current liabilities		28,086	36,493
Total liabilities		173,422	199,313
Total equity and liabilities		130,620	155,656

The accompanying notes are an integral part of these condensed consolidated financial statements.

CureVac AG

Interim Condensed Consolidated Statements of Changes in Shareholders' Equity
For the three months ended March 31, 2020 and 2019

(in thousands of EUR)	Issued capital	Capital reserve	Accumulated deficit	Currency translation reserve	Total equity
Balance as of January 1, 2020	<u>727</u>	<u>472,396</u>	<u>(515,947)</u>	<u>22</u>	<u>(42,802)</u>
Net loss	—	—	(23,850)	—	(23,850)
Other comprehensive income (loss)	—	—	—	48	48
Total comprehensive income (loss)	—	—	(23,850)	48	(23,802)
Share-based payment expense	—	2,947	—	—	2,947
Issuance of share capital	16	19,984	—	—	20,000
Balance as of March 31, 2020 (unaudited)	<u>743</u>	<u>495,327</u>	<u>(539,797)</u>	<u>70</u>	<u>(43,657)</u>

(in thousands of EUR)	Issued capital	Capital reserve	Accumulated deficit	Currency translation reserve	Total equity
Balance as of January 1, 2019	<u>727</u>	<u>447,440</u>	<u>(416,074)</u>	<u>(10)</u>	<u>32,083</u>
Net loss	—	—	(21,308)	—	(21,308)
Other comprehensive income (loss)	—	—	—	36	36
Total comprehensive income (loss)	—	—	(21,308)	36	(21,272)
Balance as of March 31, 2019 (unaudited)	<u>727</u>	<u>447,440</u>	<u>(437,382)</u>	<u>26</u>	<u>10,811</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

CureVac AG

Interim Condensed Consolidated Statements of Cash Flows

(in thousands of EUR)	For the three months ended March 31,	
	2019	2020
	(unaudited)	
Operating activities		
Loss before income tax	(21,308)	(23,850)
Adjustments to reconcile loss before tax to net cash flows		
Finance income	(649)	(1,041)
Finance expense	90	1,719
Depreciation and amortization	1,561	1,831
Share-based payment expense	—	2,947
Working capital changes		
Decrease / (increase) in trade receivables and contract assets	3,476	13,201
Decrease / (increase) in inventory	(1,401)	772
Decrease / (increase) in other assets	129	(3,357)
Receipts from grants from government agencies and similar bodies	3,477	11,717
(Decrease) / increase in trade and other payables and contract liabilities	(8,208)	(6,430)
(Decrease) / Increase in other current financial and other liabilities	417	99
Interest paid	(214)	(288)
Net cash flow used in operating activities	<u>(22,630)</u>	<u>(2,680)</u>
Investing activities		
Purchase of property, plant and equipment	(1,956)	(4,490)
Purchase of intangible assets	(290)	(776)
Proceeds from asset-related grants	—	1,907
Proceeds from sale of other financial assets	18,971	40
Net cash flow provided by (used in) investing activities	<u>16,723</u>	<u>(3,319)</u>
Financing activities		
Equity-related transaction costs	—	(626)
Payments on lease obligations	(279)	(632)
Proceeds from issuance of share capital	—	20,000
Net cash flow provided by (used in) financing activities	<u>(279)</u>	<u>18,742</u>
Currency translation gains (losses) on cash and cash equivalents	36	47
Increase (decrease) in cash and cash equivalents	(6,156)	12,743
Cash and cash equivalents, beginning of period	21,380	30,684
Cash and cash equivalents, end of period	<u>15,260</u>	<u>43,474</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed explanatory notes to the financial statements

1. Corporate Information

CureVac AG, (“CureVac” or “CV” or the “Company”) is the parent company of CureVac Group (“Group”). The Company’s registered headquarters is Friedrich-Miescher-Strasse 15, 72076 Tuebingen, Germany and the Company is registered in the commercial register (Handelsregister) at the local court (Amtsgericht) of Stuttgart, Germany under HRB 754041. CureVac is a global clinical-stage biopharmaceutical company developing a new class of transformative medicines based on the messenger ribonucleic acid (mRNA) that has the potential to improve the lives of people. The Group was spun out of the University of Tuebingen (Germany) and is primarily funded by its major shareholder, the dievini Hopp BioTech holding GmbH & Co. KG (dievini), which is an investment company dedicated to the support of companies in health and life sciences.

2. Basis of preparation

Basis of preparation

The interim condensed consolidated financial statements for the three months ended March 31, 2020 have been prepared in accordance with IAS 34 Interim Financial Reporting.

The interim condensed consolidated financial statements do not include all the information and disclosures required in the annual consolidated financial statements and should be read in conjunction with the Group’s annual consolidated financial statements as at December 31, 2019 and for the two years then ended. The interim condensed consolidated financial statements were authorized by the Management Board for presentation to the Supervisory Board on July 21, 2020. The Group’s consolidated financial statements are presented in Euros (“EUR”). Unless otherwise stated, amounts are rounded to thousands of Euros, except per share amounts.

New standards, interpretations and amendments adopted by the Group

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group’s annual consolidated financial statements for the year ended December 31, 2019. The new and amended standards and interpretations applied for the first time as of January 1, 2020, as disclosed in the notes to the consolidated financial statements as at December 31, 2019 and for the two years then ended, had no impact on the interim condensed consolidated financial statements of the Group as of and for the three months ended March 31, 2020. The Group has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

3. Notes to the interim condensed consolidated financial statements

3.1 Revenue from contracts with customers

The Group recognized the following revenues:

	Three Months ended March 31,	
	2019	2020
	EUR k	EUR k
United States		
Eli Lilly and Company	2,592	1,993
Germany		
Boehringer Ingelheim	467	482
Switzerland		
CRISPR	97	78
Netherlands		
Genmab	—	566
Total	<u>3,156</u>	<u>3,119</u>

Of these revenues, all of which were recognized over time as part of collaboration agreements, during the three months ended March 31, 2020, EUR 1,870k (March 31, 2019: EUR 1,465k) related to delivery of research services combined with an IP license (recognized from the upfront payments as further illustrated in the table below), EUR 1,054k (March 31, 2019: 1,691k) were related to delivery of products and EUR 195k (March 31, 2019: nil) were recognized from those research and development services considered distinct within the agreements.

The Group has received upfront payments which were initially deferred and are subsequently recognized as revenue as the Group renders services over the performance period. Below is a summary of such payments and the related revenues recognized:

Customer	Upfront payments	Upfront payments included in	Upfront payments included in	Revenue recognized from upfront payments	
	March 31, 2020	contract liabilities at March 31, 2019	contract liabilities at March 31, 2020	March 31, 2019	March 31, 2020
	(in thousands)	(EUR k)	(EUR k)	(EUR k)	
Eli Lilly and Company	USD 50,000 (EUR 42,200) *	37,492	33,975	879	879
CRISPR	USD 3,000 (EUR 2,524) *	2,091	1,782	77	77
Boehringer Ingelheim	EUR 30,000	17,312	15,403	509	467
Genmab	USD 10,000 (EUR 8,937) *	—	8,490	—	447
Total		<u>56,895</u>	<u>59,650</u>	<u>1,465</u>	<u>1,870</u>

* Translated at the currency exchange rate prevailing on the transaction date.

Contract balances:

	December 31, 2019	March 31, 2020
	EUR k	EUR k
Trade receivables	15,690	2,410
Contract assets	1,463	2,422
Contract liabilities	73,521	71,650

Trade receivables are non-interest bearing and are generally settled within 30 to 45 days. During the three months ended March 31, 2020, the decrease in trade receivables was primarily due to collections in accordance with standard payment terms.

Refer to Note 16 for additional information regarding the Group's collaboration agreement with Eli Lilly and Company subsequent to March 31, 2020.

3.2 Cost of sales

The cost of sales consists of the following:

	Three months ended March 31,	
	2019	2020
	EUR k	EUR k
Personnel	(2,488)	(2,821)
Materials	(2,928)	(1,550)
Third-party services	(1,489)	(675)
Maintenance and lease	(206)	(159)
Amortization and depreciation	(401)	(246)
Other	(46)	(24)
Total	(7,558)	(5,475)

Refer to Note 9 for additional information regarding inventory write-downs recognized in materials expense during the three months ended March 31, 2020.

3.3 Selling and distribution expenses

Selling and distribution expenses consist of the following:

	Three months ended March 31,	
	2019	2020
	EUR k	EUR k
Personnel	(79)	(240)
Maintenance and lease	(88)	—
Amortization and depreciation	(19)	(41)
Other	(12)	(49)
Total	(198)	(330)

Personnel expenses mainly include salary and salary-related expenses, during the three months ended March 31, 2020, of EUR 103k (March 31, 2019: 79k) and share-based payment expense of EUR 137k (March 31, 2019: nil).

3.4 Research and development expenses

R&D expenses consists of the following:

	Three months ended March 31,	
	2019	2020
	EUR k	EUR k
Materials	(963)	(1,165)
Personnel	(3,251)	(3,686)
Amortization and depreciation	(129)	(351)
Patents and fees to register a legal right	(1,202)	(823)
Third-party services	(5,094)	(4,263)
Maintenance and lease	(111)	(454)
Other	(112)	(160)
Total	(10,862)	(10,902)

Personnel expenses mainly include salary and salary-related expenses, during the three months ended March 31, 2020, of EUR 3,447k (March 31, 2019: 3,251k) and share-based payment expense of EUR 239k (March 31, 2019: nil).

3.5 General and administrative expenses

General and administrative expenses include the following:

	Three months ended March 31,	
	2019	2020
	EUR k	EUR k
Personnel	(3,936)	(7,055)
Maintenance and lease	(990)	(1,333)
Third-party services	(571)	(1,420)
Legal and other professional services	(154)	(427)
Amortization and depreciation	(426)	(418)
Other	(810)	(842)
Total	<u>(6,887)</u>	<u>(11,495)</u>

Personnel expenses mainly include salary and salary-related expenses, during the three months ended March 31, 2020, of EUR 4,484k (March 31, 2019: 3,936k) and share-based payment expense of EUR 2,571k (March 31, 2019: nil). Refer to Note 5 for further information.

3.6 Other operating income

	Three months ended March 31,	
	2019	2020
	EUR k	EUR k
Grants and other cost reimbursements from government agencies and similar bodies	531	1,623
Other	201	372
Total	<u>732</u>	<u>1,995</u>

During the three months ended March 31, 2019 and 2020 income from grants with government agencies and similar bodies resulted from the following:

Coalition for Epidemic Preparedness Innovations (CEPI)

During the three months ended March 31, 2020, CureVac recognized the reimbursement by CEPI of approved expenses of EUR 1,446k (March 31, 2019: EUR 285k) as “other operating income” and EUR 1,907k (March 31, 2019: EUR nil) were deducted from the carrying amount of qualifying assets recorded in property, plant and equipment.

As of March 31, 2020, EUR 11,717k in grant funds received have been deferred and are presented within other liabilities (as of March 31, 2019: EUR 3,477k). During the three months ended March 31, 2020, the increase in other liabilities (current) was primarily due to additional grant funds received and deferred.

In January 2020, CureVac and CEPI entered a collaboration to develop a vaccine against the new coronavirus SARS-CoV-2. The aim of the cooperation is to safely advance vaccine candidates into clinical testing as quickly as possible. The agreement builds upon the existing partnership between CureVac and CEPI to develop a rapid-response vaccine platform and includes additional initial funding of up to USD 8,300k by CEPI for accelerated vaccine development, manufacturing and clinical tests. Refer to Note 16 Subsequent events for additional information regarding this grant subsequent to March 31, 2020.

Bill & Melinda Gates Foundation (BMGF)

During the three months ended March 31, 2020, CureVac recognized EUR 177k (March 31, 2019: EUR 246k) from the amortization of the grants on a straight-line basis as other operating income.

4. Equity

The issued capital consists of Series A, B and C shares, which have a nominal value of EUR 1, full voting rights and are fully paid-in. The amount of Series A, B and C shares issued as of December 31, 2019 and March 31, 2020 are as follows:

Series	Shares as of December 31, 2019	Shares as of March 31, 2020
A	23,400	23,400
B	688,692	705,037
C	14,500	14,500
Total	<u>726,592</u>	<u>742,937</u>

The increase in shares outstanding between December 31, 2019 and March 31, 2020 resulted from a February 18, 2020, issuance of 16,345 Series B shares with a par value of EUR 1 per share to Genmab A/S, a Danish corporation, for a total amount of EUR 20,000k.

5. Share-based payments

During the three months ended March 31, 2020 and 2019, the Group recognized share-based based payments expense of EUR 2,947k and nil, respectively. EUR 2,551k of the expense recognized during the three months ended March 31, 2020 was recognized in general and administrative expenses from the Former Chief Executive Officer Grant upon the immediate vesting in March 2020 of 6,053 of unvested options, which had been awarded to the then-CEO of the Group, due to the discontinuation of his service contract. As of March 31, 2020, none of the options from the Former Chief Executive Officer Grant are exercisable because an exit event or capital market transaction had not occurred. Refer to Note 16 for additional information regarding these options subsequent to March 31, 2020.

6. Fixed Assets**6.1 Development of property, plant and equipment**

During the three months ended March 31, 2020, the increase in property, plant and equipment was due primarily to the purchase of technical equipment and machines and other equipment of EUR 1,131k as well as additional amounts recognized as construction in progress of EUR 6,539k.

6.2 Non-current other assets

During the three months ended March 31, 2020, the decrease of the non-current other assets was due primarily to the transfer of a lease deposit payment of EUR 4,722, associated with a new lease, to right-of-use assets in accordance with IFRS 16.

7. Prepaid expenses and other assets (current)

During the three months ended March 31, 2020, the Group recognized EUR 626k as deferred costs of an equity transaction in prepaid expenses and other assets in the statement of financial position.

8. Right-of-use assets and lease liabilities

During the three months ended March 31, 2020, the increase of EUR 18,530k in right-of-use assets and lease liabilities was primarily due to the accounting for new lease agreements in accordance with IFRS 16.

9. Inventories

During the three months ended March 31, 2020, the Group had no write-downs of inventory (March 31, 2019: 1,504k), which were recognized as materials expense in cost of sales.

10. Financial assets and financial liabilities

Fair values of cash and cash equivalents, trade receivables, trade payables, and other current liabilities approximate their carrying amounts largely due to the short-term maturities of these instruments.

Financial liabilities include two fixed-interest rate loans. The fair value of these fixed-interest rate loans is calculated based on significant observable inputs (Level 2). As of March 31, 2020, and December 31, 2019, the carrying value approximates their fair values as there have been no significant changes in relevant interest rates.

There were no transfers between Level 1 and Level 2 fair value measurements and no transfers into or out of Level 3 fair value measurements during the three months ended March 31, 2020 or 2019.

11. Convertible loans from related parties

Dietmar Hopp (or the “Lender”), principal of dievini Hopp BioTech holding GmbH & Co. KG (dievini), the majority shareholder of the Group, granted on May 3, 2019 a loan facility, fully convertible into equity, for a nominal amount of EUR 50,000k (herein “First Loan”) to CureVac (or the “Borrower”). Under the facility, CureVac had the right to draw down the First Loan in total or in tranches until March 1, 2020. The First Loan was granted for an indefinite term and bears interest in the amount of 8.0% per annum and, as of December 31, 2019, was fully drawn.

On October 24, 2019, the agreement for the First Loan was modified and fully replaced with an agreement under which, in addition to the already disbursed amount of EUR 50,000k under the First Loan, the Lender granted CureVac an additional loan with a conversion option in a nominal amount of EUR 63,927k (herein “Second Loan” and equivalent to USD 70,000k calculated on the basis of the exchange rate applicable at the date of signing the modified agreement). Under the modified agreement, the interest on both loans is 8.0% per annum, is added to the amount of the loans and is due with the loans at maturity; compound interest is not due.

CureVac has the right to use this Second Loan until December 31, 2021, if its cash balance falls below EUR 15,000k, in two tranches of EUR 20,000k and one final tranche of EUR 23,927k. CureVac drew down the first tranche of this Second Loan in the amount of USD 22,000k (EUR 19,888k) at December 19, 2019.

The loans can be terminated, thereby requiring repayment one month later, or converted into equity at any time in full or in part by the Lender, however not before December 31, 2021 unless CureVac:

- (i) initiates or concludes an acquisition of a company or sale or merger with another company of an affiliate, in which the entire business or a majority of the assets of CureVac are transferred, or if CureVac is acquired or sold or merges with another company or
- (ii) carries out a financing transaction amongst shareholders, including issuance of additional convertible loans

In either of such cases, the Lender can then terminate the loans immediately, requiring repayment in cash in case of (i) or conversion into equity in case of (ii).

Additionally, CureVac can terminate the loans if it executes a cross-over financing round in direct or indirect preparation of an IPO, in which case, the Lender would be obliged to accept conversion of the loans into equity. Upon conversion into equity, the amount of the loans and accrued interest converted would convert into a variable number of shares of the same class and at the same price per share as those issued in the financing enabling exercise of the conversion.

As of March 31, 2020 and December 31, 2019, EUR 69,888k in total principal was outstanding on the First Loan and Second Loan and had accrued total interest of EUR 4,233k and EUR 1,960k, as of these dates, respectively.

Additionally, as of March 31, 2020 and December 31, 2019, the Group recognized EUR 7,604k of the convertible loan in equity. This component of the loan proceeds allocated to equity represents the residual value between the consideration received for each single tranche and the fair value of the corresponding financial liabilities at initial recognition. During the three months ended March 31, 2020, EUR 1,440k of interest expense was recognized on the First Loan and Second Loan (March 31, 2019: nil).

Refer to Note 16 for additional information regarding these loans subsequent to March 31, 2020.

12. Income tax

The Group calculates the interim income tax benefit or expense using the best estimate of the weighted average annual effective income tax rate expected for the full financial year. For the three months ended March 31, 2020 and 2019, the Group recorded a consolidated income tax benefit and expense of EUR 44k and EUR -142k, respectively. The income tax benefit for the three months ended March 31, 2020 resulted from income tax expenses from CureVac Inc. of EUR 112k (March 31, 2019: EUR 142k) and deferred tax benefit on taxable temporary differences of EUR 156k (March 31, 2019: nil).

13. Disclosure of financial instruments and risk management

No changes have occurred regarding our risk management activities as disclosed in the notes to the consolidated financial statements as of December 31, 2019.

14. Earnings per share

Earnings per share is calculated pursuant to *IAS 33 Earnings per Share* by dividing the consolidated net loss in CureVac AG by the average weighted number of shares outstanding in the fiscal period.

The weighted number of shares outstanding for the three months ended March 31, 2020 was 734,315 (March 31, 2019: 726,592). This has led to a basic loss per share for the three months ended March 31, 2020 and 2019 of EUR 32.48 and EUR 29.32, respectively. The 5,282 share options granted to the management are potential ordinary shares for the purpose of calculating diluted earnings per share. Since the conversion of the options to ordinary shares would decrease loss per share, they are considered antidilutive. Therefore, the diluted earnings per share equals basic earnings per share for the three months ended March 31, 2020 and 2019.

The same considerations should be taken into account for the potentially issuable 51,265 shares under the New VESOP and the 29,053 shares under the Former Chief Executive Officer Grant, which are described under Note 9.3 "Virtual shares program II (New VSOP)" and Note 9.4 "Former Chief Executive Officer Grant", respectively, of the notes to the consolidated financial statements as at December 31, 2019 as well as the convertible loans granted in fiscal 2019 to CureVac and described under Note 11 of these interim condensed consolidated financial statements and Note 16 of the notes to the consolidated financial statements as at December 31, 2019.

15. Related party disclosures

dievini Hopp BioTech holding GmbH & Co. KG

dievini Hopp BioTech holding GmbH & Co. KG (dievini) holds the majority of the share capital of the Company, is the controlling shareholder and is the ultimate parent of the Group.

Other related party transactions

Rittershaus Rechtsanwaelte

Since December 15, 2005, a consultant agreement is in place for an indefinite term with Rittershaus. The agreement can be terminated without notice by CureVac and with notice of three months to the end of

the quarter by Rittershaus. During the three months ended March 31, 2020, consulting fees of EUR 63k (March 31, 2019: EUR nil) were paid to the Rittershaus. Prof. Dr. Christof Hettich is a managing director of Rittershaus and dievini as well.

Dr. Ingmar Hoerr

Since June 2018, an advisory agreement between CureVac and Mr. Hoerr was in place. This contract was terminated in March 2020 after the transition of Dr. Hoerr from CureVac's supervisory board to its management board on March 10, 2020. During the three months ended March 31, 2020, advisory fees of EUR 61k (March 31, 2019: EUR 86k) were paid to Dr. Hoerr.

Dietmar Hopp

During fiscal 2019, Dietmar Hopp, principal of dievini Hopp BioTech holding GmbH & Co. KG (dievini), the majority shareholder of the Group, granted two convertible loans to the Group; see Note 11 and Note 16 for further information.

16. Subsequent events

16.1 In June 2020, the Group entered into a binding term sheet with Kreditanstalt für Wiederaufbau (KfW) pursuant to which the Group agreed to issue new Series B shares in CureVac AG in exchange for an aggregate investment of EUR 300,000k to KfW. The investment will be used by the Group for the further development of its proprietary pipeline and mRNA platform technology and the manufacturing of mRNA drug candidates and products. An investment agreement was entered into in July 2020 (see Note 16.5).

16.2 In June 2020, the Group and Eli Lilly and Company terminated the following agreements: License and Collaboration Agreement dated November 29, 2017, Early Clinical Supply Agreement dated July 5, 2018 and related Quality Agreement dated June 29, 2018. As a result, on the termination date, EUR 33,100k in contract liabilities from an upfront payment was recognized as revenue as the remaining associated performance obligations were satisfied.

16.3 In June 2020, the Group entered a loan agreement with the European Investment Bank (EIB) for EUR 75,000k for the development and large-scale production of vaccines. This loan will also support the Group's activities to complete its GMP IV production facility in Tuebingen, Germany.

16.4 In June 2020, Dietmar Hopp (as Lender) and CureVac (as Borrower) entered into an amendment to the October 29, 2019 convertible loan agreement described in Note 11, whereby:

1) CureVac may draw down the second and third tranche under the Second Loan regardless of whether its cash balance falls below EUR 15,000k.

2) If (i) CureVac carries out a financing transaction amongst shareholders or issues further convertible loans and the Lender opts to terminate the loans or (ii) CureVac executes a cross-over financing round in direct or indirect preparation of an IPO and CureVac opts to terminate the loans, then, if CureVac has sufficient cash on-hand, CureVac is obligated to repay the outstanding amount of the loans and accrued interest within four weeks of the loan termination date; otherwise, it may repay the loans using cash obtained from an alternative source.

Following this amendment, CureVac drew down the second tranche of USD 26,800k (equivalent to EUR 23,901k calculated on the basis of the exchange rate applicable at the date of receipt of the funds) available under the second loan described in Note 11.

16.5 In July 2020, the Group signed investment agreements with various investors to issue 418,466 Series B shares in CureVac AG in exchange for an aggregate investment of EUR 559,280k, inclusive of the EUR 299,999k invested by KfW discussed in Note 16.1. As of the date of authorization of these interim condensed consolidated financial statements, these shares were not issued as they had not been registered in the commercial register.

As a result of this financing round, the vested options of the former CEO became exercisable prior to CureVac's shares being publicly listed; this results in a cash claim against the Group and the reclassification of EUR 18,656k from capital reserve (equity) to liabilities.

16.6 In July 2020, the Group entered a collaboration with GlaxoSmithKline Biologicals SA for the research, development, manufacture and commercialization of mRNA-based vaccines and monoclonal antibodies targeting infectious disease pathogens.

16.7 The COVID-19 pandemic, which began in December 2019 in China and has spread worldwide continues to cause many governments to maintain measures to slow the spread of the outbreak through quarantines, travel restrictions, closure of borders and requiring maintenance of physical distance between individuals. The Company has taken a series of actions aimed at safeguarding the Company's employees and business associates, including implementing a work-from-home policy for employees except for those related to laboratory operations. By the end of June 2020, the Company was able to enable most of these employees to return and work at the office.

In January 2020, the Group and CEPI entered a collaboration to develop a vaccine against the new coronavirus SARS-CoV-2 (refer to Note 3.6). In May 2020, CEPI increased its grant award to the Group for SARS-CoV-2 vaccine development to up to USD 15,300k. In June 2020, the Group received regulatory approval from German Health Authority Paul-Ehrlich-Institute (PEI) and the Belgian Federal Agency for Medicines and Health Products (FAMHP) for the Phase 1 clinical trial for its SARS-CoV-2 vaccine program.

The rapid development and fluidity of the situation continues to present uncertainty and risk with respect to the Company, its performance and its financial results.

Report of Independent Registered Public Accounting Firm

To the Audit Committee of CureVac AG,

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of CureVac AG (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and other comprehensive income (loss), changes in shareholders' equity and cash flows for each of the two years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, in conformity with International Financial Reporting Standards as issued by the International Accounting Standard Board (IFRS).

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Dr. Elia Napolitano
Wirtschaftsprüfer
(German Public Auditor)

/s/ Steffen Maurer
Wirtschaftsprüfer
(German Public Auditor)

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

We have served as the Company's auditor since 2015.

Munich, Germany
April 29, 2020

CureVac AG

Consolidated Statements of Operations and Other Comprehensive Income (Loss)

(in thousands of EUR, except per share data)	Note	Years ended December 31,	
		2018	2019
Revenue	3.1	12,871	17,416
Cost of sales	3.2	(17,744)	(27,983)
Selling and distribution expenses	3.3	(1,085)	(1,755)
Research and development expenses	3.4	(41,722)	(43,242)
General and administrative expenses	3.5	(25,289)	(48,969)
Other operating income	3.6	808	5,587
Other operating expenses	3.7	(663)	(552)
Operating loss		(72,824)	(99,498)
Finance income		1,968	833
Finance expenses		(275)	(1,460)
Loss before income tax		(71,131)	(100,125)
Income tax benefit / (expense)	14	(110)	252
Net loss for the year		(71,241)	(99,873)
Other comprehensive income			
<i>Items that may be subsequently reclassified to profit or loss</i>			
Foreign currency adjustments		66	32
Total comprehensive loss for the year		(71,175)	(99,841)
Net loss per share (basic and diluted)		(98.05)	(137.45)

The accompanying notes are an integral part of these consolidated financial statements.

CureVac AG
Consolidated Statements of Financial Position

(in thousands of EUR)	Note	December 31,	
		2018	2019
Assets			
Non-current assets			
Intangible assets	4	6,213	5,698
Property, plant and equipment	4	40,472	48,075
Other assets	4	5,771	6,061
Right-of-use assets	2	—	13,611
Deferred tax assets	14	133	—
Total non-current assets		52,589	73,445
Current assets			
Inventories	5	2,951	6,197
Trade receivables	3	5,476	15,690
Contract assets	3	1,382	1,463
Other financial assets	6	39,253	1,458
Prepaid expenses and other assets	7	2,628	1,683
Cash and cash equivalents		21,380	30,684
Total current assets		73,070	57,175
Total assets		125,659	130,620
Equity and liabilities			
Equity			
Issued capital		727	727
Capital reserve		447,440	472,396
Accumulated deficit		(416,074)	(515,947)
Other comprehensive income		(10)	22
Total equity	8	32,083	(42,802)
Non-current liabilities			
Convertible loans	12	—	65,018
Lease liabilities	2	—	12,126
Contract liabilities	3	64,583	66,040
Deferred tax liabilities	13	—	1,623
Other liabilities		863	529
Total non-current liabilities		65,446	145,336
Current liabilities			
Other financial liabilities		77	—
Lease liabilities	2	—	2,004
Trade and other payables	11	10,913	6,475
Other liabilities	12	11,146	12,015
Income Taxes payable	13	217	111
Contract liabilities	3	5,777	7,481
Total current liabilities		28,130	28,086
Total liabilities		93,576	173,422
Total equity and liabilities		125,659	130,620

The accompanying notes are an integral part of these consolidated financial statements.

CureVac AG

Consolidated Statements of Changes in Shareholders' Equity

(in thousands of EUR)	Issued capital	Capital reserve	Accumulated deficit	Currency translation reserve	Total equity
Balance as of January 1, 2018	<u>727</u>	<u>447,438</u>	<u>(345,320)</u>	<u>(76)</u>	<u>102,769</u>
Effects from the first-time adoption of IFRS 9	—	—	(183)	—	(183)
Effects from the first-time adoption of IFRS 15	—	—	670	—	670
Adjusted balance as of January 1, 2018	<u>727</u>	<u>447,438</u>	<u>(344,833)</u>	<u>(76)</u>	<u>103,256</u>
Net loss	—	—	(71,241)	—	(71,241)
Other comprehensive income (loss)	—	—	—	66	66
Total comprehensive income (loss)	<u>—</u>	<u>—</u>	<u>(71,241)</u>	<u>66</u>	<u>(71,175)</u>
Expenses from share-based payment plan	—	2	—	—	2
Balance as of December 31, 2018	<u>727</u>	<u>447,440</u>	<u>(416,074)</u>	<u>(10)</u>	<u>32,083</u>
Net loss	—	—	(99,873)	—	(99,873)
Other comprehensive income (loss)	—	—	—	32	32
Total comprehensive income (loss)	<u>—</u>	<u>—</u>	<u>(99,873)</u>	<u>32</u>	<u>(99,841)</u>
Equity component of convertible loans	—	7,604	—	—	7,604
Deferred taxes on convertible loans	—	(2,212)	—	—	(2,212)
Expenses from share-based payment plan	—	19,564	—	—	19,564
Balance as of December 31, 2019	<u>727</u>	<u>472,396</u>	<u>(515,947)</u>	<u>22</u>	<u>(42,802)</u>

The accompanying notes are an integral part of these consolidated financial statements.

CureVac AG
Consolidated Statements of Cash Flows

(in thousands of EUR)	Years ended December 31,	
	2018	2019
Operating activities		
Loss before income tax	(71,131)	(100,125)
Adjustments to reconcile loss before tax to net cash flows		
Finance income	(1,968)	(833)
Finance expense	275	1,460
Depreciation and amortization	3,781	7,164
Loss on disposal of fixed assets	52	241
Share-based payment expense	(4,248)	19,564
Working capital changes		
Decrease / (increase) in trade receivables and contract assets	(5,595)	(10,117)
Decrease / (increase) in inventory	878	(3,246)
Decrease / (increase) in other assets	(6,106)	630
Receipts from grants from government agencies and similar bodies	214	9,304
(Decrease) / increase in trade and other payables and contract liabilities	9,402	(9,584)
(Decrease) / Increase in other current financial and other liabilities	336	(334)
Income taxes paid	(26)	(345)
Interest received	15	81
Interest paid	11	(824)
Net cash flow (used in) operating activities	(74,110)	(86,963)
Investing activities		
Purchase of property, plant and equipment	(9,406)	(11,172)
Purchase of intangible assets	(5,317)	(1,052)
Proceeds from asset-related grants	—	2,325
Proceeds from other financial assets	10,459	38,080
Net cash flow from (used in) investing activities	(4,264)	28,181
Financing activities		
Payments on lease obligation	(112)	(1,910)
Proceeds from the convertible loans	—	69,889
Net cash flow from (used in) financing activities	(112)	67,979
Net increase (decrease) in cash and cash equivalents	(78,486)	9,197
Effect of currency translation gains on cash and cash equivalents	213	107
Cash and cash equivalents, beginning of period	99,653	21,380
Cash and cash equivalents, end of period	21,380	30,684

The accompanying notes are an integral part of these consolidated financial statements.

CureVac AG**Notes to the Consolidated Financial Statements****1. Corporate Information**

CureVac AG, (“CureVac” or “CV” or the “Company”) is the parent company of CureVac Group (“Group”). The Company’s registered headquarters is Friedrich-Miescher-Strasse 15, 72076 Tuebingen, Germany and the Company is registered in the commercial register (Handelsregister) at the local court (Amtsgericht) of Stuttgart, Germany under HRB 754041. CureVac is a global clinical-stage biopharmaceutical company developing a new class of transformative medicines based on the messenger ribonucleic acid (mRNA) that has the potential to improve the lives of people. The Group was spun out of the University of Tuebingen (Germany) and is primarily funded by its major shareholder, the dievini Hopp BioTech holding GmbH & Co. KG (dievini), which is an investment company dedicated to the support of companies in health and life sciences.

2. Significant accounting policies

These consolidated financial statements are prepared on a historical cost basis under the going concern assumption. The significant accounting policies adopted in the preparation of these consolidated financial statements are described below. These accounting policies have been consistently applied to all years presented, unless otherwise stated.

The preparation of financial statements requires the use of certain accounting estimates. It also requires management to exercise its judgment in applying the Group’s accounting policies. The areas that require a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed below.

Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and were authorized by the Management Board for presentation to the Supervisory Board on April 29, 2020. The Group’s consolidated financial statements are presented in Euros (“EUR”), which is also the parent company’s functional currency. Unless otherwise stated, the numbers are rounded to thousands of Euros, except per share amounts.

Basis of consolidation

The consolidated financial statements include the Company’s wholly owned subsidiaries CureVac Inc. (Cambridge, Massachusetts, USA) and CureVac Real Estate GmbH (Tuebingen, Germany). Control is achieved when the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated upon consolidation.

The fiscal year of all Group entities corresponds to the calendar year ending December 31.

Foreign currency translation

For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions are initially translated at the spot rate applicable between the functional currency and the foreign currency on the date of the transaction. Monetary assets and liabilities in foreign currencies are translated to the functional currency using the prevailing rate at the reporting date. Foreign currency exchange differences are recorded to the statement of operations. Upon consolidation, the assets and liabilities of foreign operations are translated into Euro at the rate of exchange prevailing at the reporting date and their statements of operations

are translated at the average exchange rate of the fiscal period. The exchange differences arising on translation for consolidation are recognized in other comprehensive income (loss).

Revenue recognition

Revenue from the sale of products and services is recognized when the Group transfers control to the customer. Control generally transfers when the customer gains the ability to direct the use of and obtain substantially all of the remaining benefits from the good or service. If the contract contains more than one performance obligation, the consideration which the Group expects to receive is allocated to each of the performance obligations, using the relative stand-alone selling price method. Revenue is recognized at the amount of consideration that the Group is expected to receive in exchange for these goods or services. The Group has concluded that it acts as a principal in sales transactions as it has control over the goods or services before transferring control to the customer.

The Group primarily generates revenue from its licensing and development agreements with collaboration partners for the development of mRNA medicines against a variety of targets in diseases and conditions. These arrangements contain multiple contractual promises, including (i) licenses, or options to obtain licenses, to the Group's mRNA technology, (ii) delivery of products and (iii) research and development services. Such arrangements provide for various types of payments to the Group, including upfront fees, funding of research and development services, payment for delivered products, development, regulatory and commercial milestone payments, license fees and royalties on product sales, all of which may be satisfied at different points in time. Outlicensing agreements may be entered into with or without any further significant contractual obligations.

Goods or services promised in collaborative arrangement are accounted for as separate performance obligations if such promises are distinct (i.e., if the customer can benefit from the good or service on its own or together with other resources readily available to it and if the promise is separately identifiable from other promises in the contract).

In determining whether contractual promises are separately identifiable, the Group considers whether:

- It provides a significant service of integrating the goods or services with other goods or services that represent the combined output or outputs for which the other party has contracted
- One or more of the goods or services significantly modifies or customizes one or more of the other goods or services promised in the agreement.
- The good or services the Group promised to transfer or to provide are highly interdependent or highly interrelated.

Based on these criteria, management evaluates whether the intellectual property (IP) licenses granted, and to which further research and development activities may apply under the terms of a collaboration agreement, are distinct from the unperformed obligations to the collaboration partner, considering the relevant facts and circumstances of each arrangement. Factors considered in this determination include the nature of the IP license, the stage of development of the IP license granted, the research capabilities of the partner and the availability of mRNA technology research expertise in the general marketplace.

When an IP license is not considered to be distinct from research services, the Group generally recognizes revenue, including any upfront payment, attributable to the license on a straight-line basis, which reflects the performance of services by the Group towards satisfaction of the obligation, over the contractual or estimated performance period, which is typically from the effective date of the related collaboration agreement through the estimated date of market entry of a product developed under the agreement. The determination of the estimated date of market entry requires a significant amount of judgment given the uncertainty inherent in developing innovative pharmaceutical products and is based upon development plans with the customer, which are subject to change, clinical trials and approval of regulatory authorities. Changes in the estimated date of market entry could have a material impact on the amount and timing of revenue the Group records in future periods.

When an IP license is considered to be distinct, the Group determines whether it provides the customer with either (1) a right to access the IP throughout the license period (for which revenue is recognized over the license period) or (2) a right to use the IP as it exists at the point in time that the license is granted (for which revenue is recognized at a point in time where the customer can first use and benefit from the license).

If the transaction price in an agreement includes a variable amount, the Group estimates the amount of consideration to which the Group will be entitled in exchange for transferring the goods to the customer. At contract inception, the variable consideration is estimated based on the most likely amount of consideration expected from the transaction and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with respect the variable consideration is subsequently resolved. The estimated deferred contract liability is updated at each reporting date to reflect the current facts and circumstances.

Collaboration agreements may also provide a customer with the option to acquire additional goods or services. The accounting treatment for such options depends on the nature of these options. Options are considered to be substantive if, at the inception of an agreement, the Group is at risk as to whether the customer will choose to exercise the options to secure additional licenses. Factors that are considered in evaluating whether options are substantive include the overall objective of the arrangement, the benefit the customer might obtain from the agreement without exercising the options, the cost to exercise the options relative to the total upfront consideration, and the additional financial commitments or economic penalties imposed on the customer as a result of exercising the options.

Product sales related to collaboration agreements include RNA products and are recognized over time as goods are produced because such goods have no alternative use and the Group has enforceable right to payment. Otherwise, revenue for product sales is recognized at a point in time. In 2019 and 2018, no revenue from product sales was recognized on a point in time basis. Revenue from certain research and development services, delivered as a distinct performance obligation under the collaboration agreements, are recognized over time as the services provided have no alternative use and the Group has an enforceable right to payment.

A receivable is recognized when the consideration is unconditional and only the passage of time is required before payment is due. The transaction price is quoted in the relevant contractually agreed pricing in force at the date of customer placing the respective order for such goods or services. Amounts received prior to satisfying the above revenue recognition criteria are recorded as contract liability in the statements of financial position.

The Group may present the following contract balances:

- Contract assets — Represents the Group's right to consideration in exchange for goods or services that the Group has transferred to the customer when that right is conditioned on something other than the passage of time
- Trade receivables — Represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).
- Contract liabilities — Represents the Group's obligations to transfer goods or services to a customer for which the Group has received consideration (or consideration is due) from the customer

The Group recognizes revenue from contracts with customers relating to its core business. All other operating proceeds are presented as other operating income in the statements of operations.

Grants from government agencies and similar bodies

The Group receives grants from government agencies and similar bodies for the active participation in specific research and development projects. The grants are recognized when there is reasonable assurance that the grant will be received and all grant conditions will be met. If grant funds are received prior to qualifying expenses being incurred or assets purchased, they are recorded as a liability in other liabilities. If

the funds reimburse expenses, the liability is amortized into other operating income on a systematic basis over the period in which the corresponding expenses are incurred. If the funds reimburse purchased assets, the liability is reduced with a corresponding amount deducted from the asset's carrying amount upon recording of the qualified asset. According to the terms of the grants, grantors generally have the right to audit qualifying expenses submitted by the Group.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

i) Financial assets

Initial recognition and measurement

Financial assets are initially measured at fair value. After the initial measurement, the financial assets are subsequently classified as either amortized cost, fair value through other comprehensive income, or fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. The Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component are measured at the transaction price determined under IFRS 15.

For a financial asset to be classified and measured at amortized cost or fair value through other comprehensive income, it needs to give rise to cash flows that are "solely payments of principal and interest (SPPI)" on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified into four categories:

- financial assets at amortized cost (debt instruments);
- financial assets at fair value through other comprehensive income with recycling of cumulative gains and losses (debt instruments);
- financial assets designated at fair value through other comprehensive income with no recycling of cumulative gains and losses upon derecognition (equity instruments); or
- financial assets at fair value through profit or loss.

In fiscal 2019 and 2018, the Group only had the following financial assets to be measured at amortized cost and/or at fair value through profit or loss:

- Cash and cash equivalents
- Other financial assets
- Trade receivables and contract assets

Financial assets at amortized cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognized in the statement of operations when the asset is derecognized, modified or impaired.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized when the Group no longer has the contractual rights to the asset or the right to receive cash flows from the asset have expired.

Impairment of financial assets

An allowance for expected credit losses (ECLs) is recognized for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all of the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For cash and cash equivalents, trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date.

The Group considers a financial asset in default when contractual payments are 180 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

ii) Financial liabilities**Initial recognition and measurement**

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings or as payables.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include lease liabilities, convertible loans and trade payables.

Subsequent measurement

After initial recognition, interest-bearing loans and borrowings, trade payables and other financial liabilities are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in the statement of operations when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the statement of operations.

This category generally applies to interest-bearing loans and borrowings, including the convertible loans.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

Acquired Intangible assets

Acquired intangible assets are initially measured at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite useful lives are amortized over their useful life, generally using the straight-line method. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least annually at each fiscal year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits are accounted for prospectively. Amortization of an intangible asset is reported in the consolidated statement of operations in accordance with the function of the intangible asset.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the consolidated statement of operations in the period in which the asset is derecognized.

Acquired intangible assets are mainly comprised of software and licenses. The Group has entered into non-exclusive license agreements for patent rights and/or know-how with reputable universities, cancer research institutes and other research partners. The cost of these licenses includes fixed as well as contingent consideration mainly linked to specified events in the collaborations for which the licenses are used. The licenses are measured initially at cost which comprises the fixed purchase price components. The Group records a liability for contingent consideration and capitalizes such amounts as part of the cost of the acquired intangible asset, when the future event, upon which the contingent consideration depends, occurs or a present obligation exists.

The estimated useful lives for each intangible asset class are as follows:

Software and Licenses	3 to 8 years
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One intangible asset with a net carrying amount of EUR 3,108k and a remaining useful life of 7 years, relates to the rights to access a third-party's LNP formulation technology.

The Group does not have any intangible assets with indefinite useful lives.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairments. These costs also comprise the costs for replacement parts, which are recognized at the time they are incurred, providing they meet the recognition criteria. All other repair and maintenance costs are expensed as incurred. Depreciation is recognized on a straight-line basis over the estimated useful lives as follows:

Buildings:	1 to 10 years
Technical equipment and machines:	3 to 14 years
Other equipment, furniture and fixtures:	3 to 14 years

Property, plant and equipment are derecognized upon disposal or when no further economic benefits are expected from their continued use or sale. The gain or loss on derecognition is determined as the difference between the net disposal proceeds and the carrying amount and recognized in profit or loss in the period in which the item is derecognized.

The residual values of the assets, useful lives and depreciation methods are reviewed at the end of each fiscal year and any changes are accounted for prospectively.

The estimated useful lives and depreciation methods remained unchanged from fiscal 2018 to fiscal 2019. The residual values of the assets are generally considered to be zero.

Non-current other assets — costs to obtain a contract

Amortization of assets recognized from the costs to obtain a contract with a customer within the scope of IFRS 15 is recognized on a straight-line basis over their associated estimated useful lives.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

The Group capitalizes borrowing costs when it meets all the following conditions: (a) it incurs expenditures for the asset; (b) it incurs borrowing costs; and (c) it undertakes activities that are necessary to prepare the asset for its intended use or sale.

The Group capitalized EUR 2,188k borrowing costs during fiscal 2019 (2018: 0k). The capitalization rate used to determine the amount of the borrowing costs eligible for capitalization was during fiscal 2019 with a weighted-average of 9.13%.

Impairment of assets

At each reporting date, the Group assesses whether there is an indication that an asset may be impaired. If there is any indication of impairment or if an annual impairment test is required, the Group estimates the recoverable amount of the asset. The recoverable amount of an asset is the higher of the asset's fair value less costs of disposal and its value-in-use. It is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case it is determined at the level of the cash-generating unit. If the carrying amount of an asset exceeds its recoverable amount, the asset is impaired and written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

When there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized, any impairment loss previously recognized is reversed. The reversal may not exceed the carrying amount that would have been determined after amortization or depreciation had no impairment loss been recognized for the asset in prior periods. The amount of the reversal is recognized in profit or loss for the period.

There were no impairments or reversals of impairments in fiscal 2019 and 2018.

Leases

Through December 31, 2018, the Group applied the following policy: leases where the lessor retains substantially all the risks and benefits of ownership of the asset were classified as operating leases. Lease payments on operating leases were recorded as an expense in the income statement of operations on a straight-line basis over the term of the lease. However, a lease was classified as a finance lease if it transferred substantially all the risks and rewards incidental to ownership. If this were the case, the leased assets were initially recognized and measured at the fair value of the leased asset, or, if lower, the present value of the future minimum lease payments and depreciated using the straight-line method over the minimum contract term, taking any existing residual value into consideration. When it was reasonably certain that ownership passed to the Group at the end of the lease period, such assets were depreciated over their useful lives. The present value of the payment obligations associated with the minimum future lease payments was recognized as a liability.

Effective January 1, 2019, the Group adopted IFRS 16, which affects the Group's accounting policy for leases; refer to the section "Changes in accounting policies and disclosures — New and amended standards and interpretations" below for further information.

Inventories

Inventories are valued at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

Costs incurred in bringing each product to its present location and condition are accounted for, as follows:

- Raw materials: purchased cost on a first-in/first-out basis
- Finished goods and work in progress: cost of direct materials and labor and a proportion of manufacturing overhead based on normal operating capacity, but excluding borrowing costs

Inventories are comprised of raw materials, work in progress and finished goods and are held for use in the fulfillment of collaboration agreements.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, bank balances on demand and short-term deposits with an original maturity of three months or less.

Share-based payment awards

The Group operates a number of share-based payment programs.

An equity-settled share-based payment award is accounted for by recognizing the related expense over the vesting period of the award, with corresponding increase recorded in equity. The expense is based on the fair value determined at the grant date of the award and the number of awards expected to vest. The fair value remains unchanged after grant date. If there is no final grant date due to terms that have yet to be implemented, the fair value is based on an estimated grant date. Once the award has vested, there is no reversal of expense related to the award.

When a share-based payment award provides for different ways of settlement (i.e. cash versus shares) depending on the occurrence of contingent events, the award is accounted for based on the manner of settlement that is most probable. A change in the expected manner of settlement is accounted for as a modification.

The related share-based payment expense is recorded in the functional cost category to which the award recipient's costs are classified.

Taxes

Current tax assets and liabilities

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities based on the tax rates and tax laws that are enacted or substantively enacted at the end of the reporting period.

Deferred taxes

Deferred tax is recognized using the liability method on all temporary differences as of the end of the reporting period between the carrying amounts of assets and liabilities and their tax bases.

Deferred tax liabilities are recognized for all taxable temporary differences. The only exception is if the deferred income tax arises from initial recognition of an asset or liability in a transaction other than a business combination which, at the time of the transaction, affects neither accounting profit nor loss nor taxable profit or loss.

Deferred tax assets are recognized for deductible temporary differences and to the extent that it is probable that future taxable income will allow the deferred tax asset to be realized.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

In the event that transactions and other events are recognized directly in equity, any related taxes on income are also recognized directly in equity.

Deferred tax assets and deferred tax liabilities are offset if there is a legally enforceable right to offset current tax assets and current tax liabilities and these relate to income taxes levied by the same tax jurisdiction.

Segments

An operating segment is defined as a component of an entity for which discrete financial information is available and whose operating results are regularly reviewed by the Chief Operating Decision Maker (CODM). The CODM is comprised of the Management Board of the Group. The Group operates as a single segment dedicated to the discovery and development of biotechnological applications and the CODM makes decisions about allocating resources and assessing performance based on the Group as a whole. Accordingly, the Group has determined it operates in one operating and reportable segment.

Significant accounting judgments, estimates and assumptions

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgments and estimates in relation to assets, liabilities, contingent liabilities, revenues and expenses. Management bases its judgments and estimates on historical experience and on other various factors, it believes to be reasonable under the circumstances, the result of which forms the basis of the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions and may materially affect the financial results or the financial position reported in future periods.

Significant judgments

In the process of applying the accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements.

Accounting for share-based payments

The Group has multiple share-based payment programs. Significant judgments include classification as cash or equity-settled awards of the share-based payments and the determination of the fair value of the awards.

Since 2009, members of management and other key employees were awarded rights in a virtual shares program. In 2019, rights were awarded in a new virtual shares program and other terms specific to certain individuals. Under the terms of these programs, participants are entitled to cash payments that are contingent on the occurrence of specified exit events, which includes an initial public offering (IPO) of the Group. In the case of an IPO, the Group has a choice of setting the awards in either cash or shares. It is the Group's intention to settle in shares if such scenario materializes.

The Group considers an IPO scenario as more probable than other, cash-settled, scenarios and accounts for the virtual shares program as equity-settled.

The new awards granted in 2019 are also accounted for as equity-settled share-based payments on that basis and thus requires an estimation of the grant date fair value of the awards at the time when they were granted. Such estimates require significant judgment and, depending on when the awards are granted, are subject to change in line with the Group's development but are also dependent on the likelihood of occurrence of the exit scenario underlying the valuation. For further details, refer to Note 9.

Revenue recognition and collaboration agreements

The Group applied the following judgments in determining the amount and timing of revenue from collaboration agreements:

- Identification and determination of the nature of performance obligations in collaboration and license agreements.

The Group generates revenues from collaboration and license agreements under which the Group grants licenses to use, research, develop, manufacture and commercialize candidates and products. As these agreements comprise several promises, it must be assessed whether these promises are capable of being distinct within the context of the contract. If these promises are not distinct, they are combined until the bundle of promised goods and services is distinct. For some agreements, this results in the Group accounting for all goods and services promised in a collaboration and license agreement as a single performance obligation with a single measure of progress.

For these combined performance obligations, it must be assessed which of these promises is the predominant promise to determine the nature of the performance obligation. The Group determined that the grant of the license is the predominant promise within the (combined) performance obligation to grant a license to the customers. It was assessed that the Group grants its customers a right to access or a right to use the Group's IP due to the collaboration and license agreements.

As a result, the promise to grant a license is accounted for as a performance obligation satisfied over time as the Group's customer simultaneously receive and consumes the benefits from the Group's performance.

- Estimation of variable consideration and assessment of the constraint when determining the amount of revenue of which to defer recognition

The Group's collaboration and license agreements comprise variable considerations which are contingent on the occurrence or non-occurrence of a future event (i.e., reaching a certain milestone). When determining the deferral of revenue in a collaboration and license agreement, the Group is required to estimate the amount of consideration to which it will be entitled in exchange for transferring the promised goods or services to the customer.

As there are usually only two possible outcomes (i.e., milestone is reached or not), the Group has assessed that the method of the most likely amount is the best method to predict the amount of consideration to which the Group will be entitled.

The most likely amount of these milestone payments (i.e., the full milestone payment) is only included in the transaction price if the occurrence of reaching future milestone is highly probable. The Group has assessed that the likelihood of achieving the respective milestone decreases depending on how far the expected date of achieving the milestone lies in the future.

The Group has concluded that future milestone payments are fully constrained at the end of the current fiscal year. Future milestone payments would become unconstrained at the satisfaction of the milestone event, specifically a development event, a regulatory approval or achievement of a sales milestone.

Research and development costs and internally generated intangible assets

Research activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding are expensed as incurred.

Development activities relate to the planning or designing of substantially improved products and processes. Development expenses are capitalized only if the cost involved can be measured reliably, the product or process under development is technically feasible, future economic benefits are probable and the Group has the intention and resources to complete development and use or sell it. Cost capitalized comprises costs of material and employee services as well as other directly attributable expenses.

Due to the regulatory environment and other types of uncertainty, management has determined that the criteria for capitalizing development costs to intangible assets, as set out in IAS 38, have not been met and therefore the Group has not capitalized any development costs in 2019 and 2018. See Note 3.4 for information relating to research and development expenses incurred in the reporting period.

Accounting for convertible loans

IFRS requires that a convertible loan be bifurcated into a debt component and a conversion right if the latter is an equity instrument.

The Group assessed that the conversion right of the convertible loan is not an equity instrument, but a liability with an insignificant value.

The debt component of the convertible loan is measured using the market interest rate obtainable on similar debt instruments. The debt component is measured as liability at amortized cost until it is converted into equity or becomes due for repayment. The carrying amount of the debt component is based on an expected repayment in 2021, which is the earliest possible date at which repayment can be required by the lender, unless specified events occur.

The component of the loan proceeds allocated to equity represents the residual value between the consideration received for each single tranche and the fair value of the corresponding financial liabilities at initial recognition.

Based on these inputs, the carrying amount of the debt component was determined to be EUR 62,284k. The remainder of the proceeds is attributable to the below-market terms of the convertible loan. The amount is deemed to be a contribution by the related party and is recorded as such in equity (net of tax).

For further information on the convertible loan, see Note 12.

Changes in accounting policies and disclosures***New and amended standards and interpretations******IFRS 16 Leases******a) General***

IFRS 16 supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases-Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model.

The Group adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of January 1, 2019. Under this method, the standard is applied retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application. The Group elected to use certain transition practical expedients, including applying the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application.

b) Nature of the effect of adoption of IFRS 16

The Group has lease contracts for the building, vehicles and equipment. Before the adoption of IFRS 16, the Group classified each of its leases (as lessee) at the inception date as either a finance lease or an operating lease. A lease was classified as a finance lease if it transferred substantially all of the risks and rewards incidental to ownership of the leased asset to the Group; otherwise it was classified as an operating lease. Finance leases were capitalized at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments were apportioned between interest (recognized as finance costs) and reduction of the lease liability. In an operating lease, the leased property was not capitalized and the lease payments were recognized as rent expense in the statement of operations on a straight-line basis over the lease term. Prepaid rent was recognized under "Non-current other assets."

Leases previously classified as finance leases

The Group utilized the carrying amounts of recognized assets and liabilities at the date of initial application for leases previously classified as finance leases (i.e., the right-of-use assets and lease liabilities

equal the lease assets and liabilities recognized under IAS 17). The requirements of IFRS 16 was applied to these leases from January 1, 2019.

Leases previously accounted for as operating leases

The Group recognized right-of-use assets and lease liabilities for those leases previously classified as operating leases, except for those exempted by the practical expedients listed below. The right-of-use assets for all leases were recognized based on the amount equal to the lease liabilities. Lease liabilities were recognized based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application.

The Group also applied the available practical expedients wherein it:

- Relied on its assessment of whether leases are onerous immediately before the date of initial application
- Applied the short-term leases exemptions to leases with lease term that ends within 12 months at the date of initial application
- Excluded the initial direct costs from the measurement of the right-of-use asset at the date of initial application
- Used hindsight in determining the lease term where the contract contains options to extend or terminate the lease but did not use a single discount rate to a portfolio of leases with reasonably similar characteristics.

Based on the foregoing, as of January 1, 2019:

- Right-of-use assets of EUR 15,908k were recognized and presented separately in the statement of financial position. This includes the lease assets recognized previously under finance leases of EUR 69k that were reclassified from Property, plant and equipment and estimated costs to be incurred by the lessee for dismantling and removing the underlying asset.
- Additional lease liabilities of EUR 15,810k (included in “lease liabilities” from January 1, 2019; included in “finance lease liabilities” at December 31, 2018) were recognized.
- Prepaid rent recognized under “Non-current other assets” in the amount of EUR 4,333k was carried on forward in this line-item because the commencement date of the associated lease has not occurred as of January 1, 2019.
- Because there was no accrued rent related to previous operating leases at December 31, 2018 and Right-of-use asset equaled the additional lease liabilities and the provision for the restoration obligation, there was no deferred tax impact and no effect on accumulated deficit as of January 1, 2019.

The lease liabilities as at January 1, 2019 reconcile to the operating lease commitments as of December 31, 2018 as follows:

	EUR k
Existing commitments as at December 31, 2018	
Operating lease commitments	48,008
Minimum lease payments (notional amount) on finance lease liabilities	78
Relief option for short-term leases	(110)
Leases with commencement date after January 1, 2019 in the amounts included above as existing commitments as at December 31, 2018	(28,557)
Other	123
Gross lease liabilities as at January 1, 2019	19,542
Effect of discounting	(3,655)
Lease liabilities as at January 1, 2019	15,887
Present value of finance lease liabilities as at December 31, 2018	(77)
Lease liabilities upon initial application of IFRS 16 as at January 1, 2019	15,810
Weighted average incremental borrowing rate as at January 1, 2019	5.64%

The range of the incremental borrowing rate is between 2.32% and 7.90%.

c) Summary of new accounting policies

Set out below are the new accounting policies of the Group upon adoption of IFRS 16:

Right-of-use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received as well as any estimated costs to be incurred by the lessee for dismantling and removing the underlying asset. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognized right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life, indicated below, and the lease term. Right-of-use assets are subject to impairment according to IAS 36.

Land and Buildings:	1 to 15 years
Vehicles:	3 to 4 years
Other equipment:	2 to 5 years

Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In

addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount for the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term. Furthermore, the Group also elected to use the recognition exemptions for lease contracts that, at January 1, 2019, had a remaining lease term of 12 months or less.

Election (not) to separate lease- and non-lease components

As a practical expedient, the Group elected not to separate the fixed (but not variable) portion of non-lease components in respect of leases of building and instead accounts them as a single lease component.

d) Significant judgments

Determining the lease term of contracts with renewal options

The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

The Group has the option, under some of its leases to lease the assets for additional terms of five to ten years. The Group applies judgment in evaluating whether it is reasonably certain to exercise the option to renew. The Group considers all relevant factors that create an economic incentive for it to exercise the renewal.

After the lease commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option to renew (e.g., a change in business strategy).

The Group included the renewal period (5 years) as part of the lease term for certain building lease arrangements. Optional lease payments from both of these aforementioned extension options not included in the measurement of the lease liability exist in a gross amount of EUR 12,548k.

Estimating the incremental borrowing rate

In most cases, the Group cannot readily determine the interest rate implicit in the lease. Therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when they need to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using observable inputs (such as market interest rates, country risk premiums and credit spreads) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating and discounts for collateral).

e) Amounts recognized in the statement of financial position and statement of operations and other comprehensive income (loss)

Set out below, are the carrying amounts of the Group's right-of-use assets and the movements during the period:

	Right-of-use assets			
	Land and Buildings	Vehicles	Other equipment	Total
	EURk	EURk	EURk	EURk
As at January 1, 2019	15,536	132	239	15,907
Additions	82	59	13	154
Depreciation expense	(2,322)	(65)	(142)	(2,529)
Foreign currency translation	79	—	—	79
As at December 31, 2019	13,375	126	110	13,611

Below are the carrying amounts of lease liabilities and the movements during the period:

	EUR k
As at January 1, 2019	15,887
Additions	153
Accretion of interest	824
Payments	(2,812)
Foreign currency translation	78
As at December 31, 2019	14,130
Current	2,004
Non-current	12,126

A maturity analysis of lease liabilities is disclosed in Note 15.

The following are the amounts recognized in the statement of operations:

	EUR k
Depreciation expense of right-of-use assets	(2,529)
Interest expense on lease liabilities	(824)
Expense relating to short-term leases (included in cost of sales)	(167)
Expense relating to leases of low-value assets (included in administrative expenses)	(94)
Total amount recognized in profit or loss	(3,614)

The Group had total cash outflows for leases of EUR 3,073k in 2019.

The Group also had non-cash additions to right-of-use assets and lease liabilities of EUR 153k in 2019.

The non-cash additions to right-of-use assets and lease liabilities are the sum of the amounts disclosed above in the movements and the amounts resulting from the first-time adoption of IFRS 16 as at January 1, 2019 described above under b).

Leases not yet commenced to, which CureVac is committed at December 31, 2019, exist with fixed payment obligations for a lease of further two buildings in Tuebingen, Germany over a 15 year term in the gross amount of EUR 28,557k with a starting date of March 1, 2020 (and a respective earliest end date in 2035). In addition, optional lease payments for the renewal of this lease term for two 5 year extension options for the two buildings exist which could lead to further payments in a gross amount of EUR 21,653k

(in addition to the EUR 12,548k) disclosed above under subsection d). Moreover, the Group is committed to further future cash outflows resulting from short-term leases in the amount of EUR 62k and leases of low-value assets in the amount of EUR 64k at December 31, 2019.

Other amendments of standards and/or new interpretations

The following several other amendments and interpretations apply for the first time in 2019:

- IFRIC Interpretation 23 Uncertainty over Income Tax Treatment
- Amendments to IFRS 9: Prepayment Features with Negative Compensation
- Amendments to IAS 19: Plan Amendment, Curtailment or Settlement
- Amendments to IAS 28: Long-term interests in associates and joint ventures
- Annual Improvements 2015-2017 Cycle
 - IFRS 3 Business Combinations
 - IFRS 11 Joint Arrangements
 - IAS 12 Income Taxes
 - IAS 23 Borrowing Costs

The standards did not have a material impact on the consolidated financial statements of the Group. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements and that might have an impact on the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

- Amendments to IFRS 3: Definition of a Business
- Amendments to IAS 1 and IAS 8: Definition of Material
- Amendments to IAS 1: Presentation of Financial Statements: Classification of Liabilities as Current or Non-current
- Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform
- Amendments to References to the Conceptual Framework in IFRS Standards

The amendments above are not expected to have a significant impact on the Group's consolidated financial statements.

3. Notes to the consolidated financial statements

3.1 Revenue from contract with customers

The Group recognized the following revenues in 2019 and 2018:

	December 31, 2018	December 31, 2019
	EUR k	EUR k
United States		
Eli Lilly and Company	8,927	14,319
Germany		
Boehringer Ingelheim	3,337	2,474
Others	5	104
Switzerland		
CRISPR	602	519
Total	<u>12,871</u>	<u>17,416</u>

Of these revenues, all of which were recognized over time as part of collaboration agreements, in 2019, EUR 5,777k (2018: EUR 5,861k) related to delivery of research services combined with an IP license (recognized from the upfront payments as further illustrated in the table below), EUR 8,617k (2018: 6,713k) related to delivery of products and EUR 3,022k (2018: 297k) were recognized from those research and development services considered distinct within the agreements.

The Group has received upfront payments which were initially deferred and are subsequently recognized as revenue as the Group renders services over the performance period. Below is a summary of such payments and the related revenues recognized:

Customer	Upfront payments received or receivable at December 31, 2019 (in thousands)	Upfront payments included in contract liabilities at December 31, 2019 (in EUR k)	Revenue recognized from upfront payments (in EUR k)	
			2018	2019
Eli Lilly and Company	USD 50,000 (EUR 42,200)	34,854	3,516	3,516
CRISPR	USD 3,000 (EUR 2,524)	1,859	310	310
Boehringer Ingelheim	EUR 30,000	15,870	2,035	1,951
Genmab	USD 10,000 (EUR 8,937)	8,937	—	—
Total		<u>61,520</u>	<u>5,861</u>	<u>5,777</u>

Contract balances:

	January 1, 2018	December 31, 2018	December 31, 2019
	EUR k	EUR k	EUR k
Trade receivables	463	5,476	15,690
Contract assets	—	1,382	1,463
Contract liabilities	69,220	70,360	73,521

Trade receivables are non-interest bearing and are generally settled within 30 to 45 days.

At December 31, 2019, the Group had four collaboration partners (2018: three) that owed 100% (2018: two) of all the receivables and contract assets outstanding. There were two collaboration partners (2018: two) with balances greater than 10% of the total amounts of receivable and contract assets. Under the terms of the licenses and collaboration agreement with Genmab, CureVac recognized a receivable of USD 10,000k (EUR 8,937k). To mitigate currency risk CureVac entered into a currency forward contract for the

entire value of the receivable. The settlement date of the forward contract is February 7, 2020. CureVac did not apply hedge accounting for this derivative.

Contract liabilities include advances received from the Group's major license and collaboration agreements. The outstanding balances of these accounts increased in 2019 and 2018 due to upfront and milestone payments received or receivable of EUR 8,937k and EUR 7,000k, respectively, which were deferred and exceeded the revenues recognized from contract liabilities recorded under the collaboration agreements in each respective year.

Contract liabilities allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at year-end are as follows:

	Year ended	
	2018 EUR k	2019 EUR k
Within one year	5,777	7,481
More than one year	64,583	66,040
Total	70,360	73,521

The nature of expenses recognized in the functional categories of the statement of operations are as follows:

3.2 Cost of sales

The cost of sales consists of the following:

	2018	2019
	EUR k	EUR k
Personnel	(7,703)	(9,855)
Materials	(4,941)	(7,542)
Third-party services	(2,340)	(7,268)
Maintenance and lease	(1,758)	(1,060)
Amortization and depreciation	(893)	(2,038)
Other	(109)	(220)
Total	(17,744)	(27,983)

3.3 Selling and distribution expenses

Selling and distribution expenses consist of the following:

	2018	2019
	EUR k	EUR k
Personnel	(581)	(1,263)
Maintenance and lease costs	(300)	(167)
Amortization and depreciation	(95)	(81)
Other	(109)	(243)
Total	(1,085)	(1,755)

Personnel expenses mainly include salary and salary-related expenses of EUR 520k (2018: 581k) and expenses from share-based payments of EUR 743k (2018: 0k). Refer to Note 9 for further information.

3.4 Research and development expenses

R&D expenses consists of the following:

	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Materials	(5,867)	(4,015)
Personnel	(7,565)	(14,385)
Amortization and depreciation	(1,143)	(474)
Patents and fees to register a legal right	(4,847)	(4,551)
Third-party services	(19,921)	(18,626)
Maintenance and lease	(1,156)	(670)
Other	(1,223)	(521)
Total	<u>(41,722)</u>	<u>(43,242)</u>

Personnel expenses mainly include salary and salary-related expenses of EUR 14,127k (2018: 11,806k); additionally, in 2018, it includes a EUR 4,241k benefit recognized upon reversal of provisions due to expiration of certain virtual shares awarded under our Prior VSOP (see Note 9).

Third-party services mainly relate to research services provided by third-party laboratories, clinical services and R&D consulting services.

3.5 General and administrative expenses

General and administrative expenses include the following:

	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Personnel	(10,084)	(31,645)
Maintenance and lease costs	(3,239)	(4,604)
Third-party services	(4,006)	(5,970)
Legal and other professional services	(4,078)	(2,110)
Amortization and depreciation	(1,635)	(2,182)
Other	(2,247)	(2,458)
Total	<u>(25,289)</u>	<u>(48,969)</u>

Personnel expenses mainly include salary and salary-related expenses of EUR 13,083k (2018: 10,105k) and expenses from share-based payments of EUR 18,562k (2018: 0k). Other mainly consists of travel expenses of EUR 811k (2018: 853k) and office materials of EUR 1,647k (2018: 1,394k).

3.6 Other operating income

Other operating income relates to:

	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Grants and other cost reimbursements from government agencies and similar bodies	808	5,385
Other	—	202
Total	<u>808</u>	<u>5,587</u>

In 2019 and 2018 income from grants with government agencies and similar bodies resulted from the following:

Coalition for Epidemic Preparedness Innovations

The Coalition for Epidemic Preparedness Innovations (CEPI) is an innovative partnership between public, private, philanthropic, and civil organizations, launched at the World Economic Forum in Davos in 2017, to develop vaccines to stop future epidemics. CEPI's priority diseases include Ebola virus, Lassa virus, Middle East Respiratory Syndrome coronavirus, Nipah virus, Rift Valley Fever and Chikungunya virus. CEPI also invests in platform technologies that can be used for rapid vaccine and immunoprophylactic development against unknown pathogens (i.e., Disease X).

In February 2019, CureVac entered into a partnership agreement worth up to USD 34,000k with CEPI to further develop CureVac's The RNA Printer™ prototype. Under the three-year partnership agreement, CureVac will use its mRNA platform for the preclinical development of a Lassa virus vaccine (a high-priority disease on the World Health Organization R&D list), a yellow fever vaccine and CureVac's rabies virus vaccine. Funds are to be received semi-annually in advance, to cover costs for the next six months. These payments are allocated to the agreed and signed statements of work. Management concluded that the arrangement should be accounted for by analogy to IAS 20.

CureVac is required to use reasonable efforts to achieve certain development milestones and is responsible for conducting certain clinical trials. In the event of an infectious disease outbreak, where such outbreak can be addressed by a Lassa virus, SARS-CoV-2 or future vaccine developed under the agreement, CureVac must manufacture such vaccine for use in the area affected by the outbreak on economic terms that satisfy CEPI's equitable access guidelines or otherwise allow CEPI or a third party to supply such vaccine in the affected area.

CureVac is required to grant certain approved manufacturers all necessary rights to use certain of CureVac's pre-existing IP and IP developed under the CEPI Agreement to further develop CureVac's automation solution and manufacture products for the treatment of certain diseases in geographic areas where there is an outbreak on economic terms that satisfy CEPI's equitable access guidelines. CureVac must provide all necessary commercially reasonable support to such approved manufacturers to facilitate such efforts.

CureVac solely owns all IP developed under the CEPI Agreement but is required to obtain CEPI's consent prior to exploiting any IP developed under the CEPI Agreement if such exploitation is in conflict with or goes against CEPI's mission or policies.

In the event that CEPI terminates the agreement, CureVac will grant CEPI a license under CureVac's background IP and IP developed under the agreement to, among other things, develop and use CureVac's RNA Printer for use in treating certain infectious diseases and to manufacture products developed under the agreement.

During the year ended December 31, 2019, CureVac recognized the reimbursement of approved expenses of EUR 3,607k (2018: EUR 0k) as "other operating income" and EUR 2,325k (2018: EUR 0k) were deducted from the carrying amount of qualifying assets recorded in property, plant and equipment.

As of December 31, 2019, EUR 2,886k in grant funds received have been deferred and are presented within other liabilities (as of December 31, 2018: EUR 0k).

Bill & Melinda Gates Foundation (BMGF)

BMGF finances, in the form of grants, various programs that CureVac operates for the development of vaccines, hence promoting and accelerating the development of CureVac's technology platform. Through its equity investment, BMGF supports mainly the development of CureVac's technology platform including the construction of a production plant in accordance with the GMP (Good Manufacturing Practice) standard on an industrial scale.

In 2015, CureVac entered into a Global Access Commitments Agreement with the Bill & Melinda Gates Foundation pursuant to which the Company is required to take certain actions to support the Bill & Melinda Gates Foundation's mission.

In November 2016, in connection with the Global Access Agreement, CureVac received a grant of USD 653k (EUR 614k) in funding for the development of a vaccine for picornaviruses. In November 2017, also in connection with the Global Access Agreement, the company received two additional grants: an amount of USD 1,000k (EUR 852k) was received for the development of a universal influenza vaccine and an amount of USD 800k (EUR 673k) was received for a malaria vaccine. In August 2019, the Company received a second payment for the universal influenza program amounting to USD 540k (EUR 486k).

During the year ended December 31, 2019 CureVac recognized EUR 768k (2018: EUR 486k) from the amortization of the grants on a straight-line basis as other operating income.

As of December 31, 2019, EUR 1,262 in grant funds received have been deferred and presented within other liabilities (as of December 31, 2018: EUR 1,544k).

3.7 Other operating expenses

Other operating expenses relates to:

	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Remuneration of supervisory board	(343)	(521)
Other	(320)	(30)
Total	<u>(663)</u>	<u>(552)</u>

4. Fixed Assets

4.1 Development of property, plant and equipment and intangible assets

The development of property, plant and equipment and of intangible assets for the year ended December 31, 2018 and 2019 were as follows:

Intangible assets

(in thousands of EUR)	Software and licenses	Advance payments	Total
<i>Acquisition costs</i>			
As of January 1, 2018	3,402	235	3,638
Additions	5,314	2	5,317
As of December 31, 2018	<u>8,717</u>	<u>238</u>	<u>8,954</u>
<i>Cumulative amortization and impairment charges</i>			
As of January 1, 2018	1,545	—	1,545
Amortization	1,197	—	1,197
As of December 31, 2018	<u>2,742</u>	<u>—</u>	<u>2,742</u>

(in thousands of EUR)	Software and licenses	Advance payments	Total
Acquisition costs			
As of January 1, 2019	8,717	238	8,954
Additions	738	44	782
Disposals	(6)	—	(6)
As of December 31, 2019	<u>9,449</u>	<u>282</u>	<u>9,731</u>
Cumulative amortization and impairment charges			
As of January 1, 2019	2,742	—	2,742
Amortization	1,295	—	1,295
Disposals	(4)	—	(4)
As of December 31, 2019	<u>4,033</u>	<u>—</u>	<u>4,033</u>
Carrying amount			
As of January 1, 2018	1,858	235	2,093
As of December 31, 2018	5,975	238	6,213
As of December 31, 2019	<u>5,416</u>	<u>282</u>	<u>5,698</u>

Property, plant and equipment

(in thousands of EUR)	Buildings	Technical equipment and machines	Other equipment, furniture and fixtures	Assets under construction	Total
Acquisition costs					
As of January 1, 2018	5,398	12,230	4,665	27,103	49,397
Additions	490	953	719	7,244	9,406
Disposals	—	(150)	(157)	—	(307)
Reclassifications	—	1,303	19	(1,323)	—
Currency translation	—	—	—	1	1
As of December 31, 2018	<u>5,888</u>	<u>14,336</u>	<u>5,247</u>	<u>33,025</u>	<u>58,497</u>
Cumulative depreciation and impairment charges					
As of January 1, 2018	1,337	4,610	2,654	7,120	15,721
Depreciation	371	1,299	890	—	2,559
Disposals	—	(99)	(157)	—	(255)
As of December 31, 2018	<u>1,708</u>	<u>5,810</u>	<u>3,387</u>	<u>7,120</u>	<u>18,025</u>

(in thousands of EUR)	Buildings	Technical equipment and machines	Other equipment, furniture and fixtures	Assets under construction	Total
Acquisition costs					
As of January 1, 2019	5,888	14,336	5,247	33,025	58,497
Additions	854	2,152	712	7,435	11,152
Disposals	(65)	(319)	(248)	—	(632)
Reclassifications	167	883	187	(1,237)	—
Currency translation	—	—	3	4	6
As of December 31, 2019	<u>6,844</u>	<u>17,051</u>	<u>5,902</u>	<u>39,226</u>	<u>69,023</u>
Cumulative depreciation and impairment charges					
As of January 1, 2019	1,708	5,810	3,388	7,120	18,026
Depreciation	779	1,637	899	—	3,315
Disposals	(37)	(190)	(164)	—	(392)
Currency translation	—	—	1	—	1
As of December 31, 2019	<u>2,449</u>	<u>7,257</u>	<u>4,123</u>	<u>7,120</u>	<u>20,949</u>
Carrying amount					
As of January 1, 2018	4,061	7,621	2,011	19,982	33,675
As of December 31, 2018	4,181	8,526	1,860	25,904	40,472
As of December 31, 2019	<u>4,395</u>	<u>9,795</u>	<u>1,779</u>	<u>32,105</u>	<u>48,075</u>

4.2 Non-current other assets

Non-current other assets of EUR 6,061k (2018: EUR 5,771k) consist of costs to obtain a contract of EUR 966k (2018: EUR 749k), a security deposit for a building of EUR 390k (2018: EUR 390k) as well as a deposit payment for a lease of EUR 4,705k (2018: EUR 4,632k).

The amortization of capitalized costs to obtain a contract in 2019 was EUR 25k (2018: EUR 25k).

5. Inventories

Inventories include the following:

	2018	2019
	EUR k	EUR k
Raw materials	2,742	6,177
Finished goods	—	14
Other	209	6
Total	<u>2,951</u>	<u>6,197</u>

Raw materials were written-down by EUR 4,136k (2018: EUR 375k) due to obsolescence and net selling prices being lower than carrying cost related to a specific collaboration arrangement.

6. Other financial assets

Other financial assets include the following:

	2018	2019
	EUR k	EUR k
Short-term investments	39,024	430
Other	229	1,028
Total	<u>39,253</u>	<u>1,458</u>

7. Prepaid expenses and other current assets

Prepaid expenses and other current assets of EUR 1,683k (2018: 2,628k) mainly include prepayments for future service agreements and goods in the amount of EUR 1,150k (2018: EUR 421k) and outstanding VAT refund claims of EUR 533k (2018: EUR 1,761k). The net amount of VAT refund claims and VAT payables does not bear interest and is reported to the tax authorities on a monthly basis.

8. Equity

The issued capital consists of Series A, B and C shares which have a nominal value of EUR 1, full voting rights and are fully paid-in. The amount of Series A, B and C shares issued as of December 31, 2019 and 2018 and January 1, 2018 are as follows:

Series	Shares
A	23,400
B	688,692
C	14,500
Total	726,592

Series B and C shares include preference rights in the case of a defined exit event (e.g., trade sale or merger) of CureVac. The Series C shares also include a liquidation preference which grants the shareholders the right to adjust their shares by a factor of between 1 and 3 depending on the proceeds generated in such defined exit event. The Series C shares were issued for share-based compensation (see Note 9). In case of an initial public offering (IPO) of CureVac, the liquidation preferences of the Series B and C shares lapse. This liquidation preference is classified as an equity-settled share-based payment.

At the Annual General Meeting of June 17, 2019, it was decided that the number of (virtual) option rights to be issued as part of a new employee program (taking into account the scope of the existing employee participation program) will be set at 15% of the issued capital of CureVac AG.

The Series B shares held by the Bill and Melinda Gates Foundation (BMGF) include certain further rights under which CureVac would be obliged to buy back the shares at a specified minimum amount under defined circumstances if the buy-back is allowed according to German corporate law (Aktiengesetz). However, management has concluded the defined circumstances are all under the control of the Company.

Capital reserves

Capital reserves may only be released and distributed to shareholders to the extent that the additional paid-in capital as reported in the Group's statutory financial statements prepared under German GAAP is available for release and exceeds the accumulated deficit, including current year losses, as reported in those statutory financial statements.

Recent financing rounds

The following financings were initiated by the end of fiscal 2019:

Pursuant to an Investment and Shareholders' Agreement ("ISA"), effective December 19, 2019, Genmab A/S, a Danish corporation, agreed to purchase 16,345 Series B shares in the Company in exchange for EUR 20,000k in cash.

As of December 31, 2019, CureVac had received a total amount of EUR 16,345, corresponding to the par value of EUR 1 per share agreed to be purchased under the ISA. However, as the shares were not yet registered in the commercial register as of December 31, 2019, according to German law, the shares were not considered issued as of this date.

Convertible loans

The total amount recognized in equity in fiscal 2019 has been EUR 7,604k. Directly attributable transaction costs from this transaction have been determined to be immaterial and therefore recognized as an expense in fiscal 2019. See Note 12 for further information.

9. Share-based payments

During the years ended December 31, 2019 and December 31, 2018, the Group had the following share-based arrangements.

9.1 Management share option plans

At January 1, 2018, a total of 8,932 share options granted to five members of (former) management were outstanding and exercisable. All these options grant the holder the right to acquire shares of CureVac at nominal value and are classified as equity-settled share-based payments. These management share options were granted and vested prior to January 1, 2013. 3,650 of these options expired on December 31, 2018 and the remaining 5,282 options will expire on December 31, 2021.

According to the shareholder`s agreement in place, sufficient authorized capital (“genehmigtes Kapital”) to enable CureVac AG to fulfill the rights under these 5,282 remaining share options at December 31, 2019 was authorized at the Annual General Meeting in 2016 and can be utilized until July 25, 2021.

See the description of the accounting for the Series C shares under Note 8. Equity.

No expenses have been recognized during the years ended December 31, 2019 and December 31, 2018 under these programs.

9.2 Virtual shares program I

Description of the program

In addition to the management share option plans described above, since 2009, CureVac has operated a virtual shares program for selected key employees of the Group (“Prior VSOP”) originally up to 60,175 (2018: 60,175) Beteiligungspunkte (herein referenced as “virtual shares”). The main features of the Prior VSOP were originally as follows:

- The beneficiaries do not hold direct interests in CureVac but receive virtual shares at no cost, the notional value of which is equal to EUR 1 per ordinary share.
- The virtual shares are earned on a monthly basis (graded vesting) over a period of one to five years.
- Virtual shares allocated and earned are settled by CureVac in cash if an exit event occurs (e.g. trade sale, merger). In the event of a change of the former CureVac GmbH to an AG, CureVac may convert those virtual shares to share options.
- If no exit event or no modification into share options occurs within the term of the virtual shares program all rights from the virtual shares program lapse / have lapsed (which, depending on the individual agreements, is / has been September 30, 2018, December 31, 2018, September 30, 2020 or December 31, 2020).
- Vested virtual shares of former employees are measured based on the relevant valuation of the Company at the time leaving the company.

In July 2016, the Company modified the Prior VSOP adding an IPO as additional exit scenario. Under the terms of that scenario, participants would be able to exercise all or part of their (vested) virtual shares entitlement subject to further conditions such as the ability of the main shareholder to divest portions of its investment, minimum trading volumes or the ultimate marketing approval of relevant products. The Company may settle such entitlements in shares of the Company or in cash. As part of this modification the Company extended the term of the program until December 31, 2025 or by the end of 9 years after the day of the initial listing in the case of an IPO. Since then, the virtual shares program was accounted for as equity-settled.

However, according to the Investment and Shareholders` Agreement (“ISA”) with an effective date as of December 19, 2019, in all defined exit events the economic burden of the Prior VSOP shall be borne

exclusively by the existing shareholders before the financing round which took place in October 2015 and therefore this group of shareholders will settle the claims of the Prior VSOP's beneficiaries by transferring their shares to CureVac for nominal amount or by transferring cash, if CureVac has to settle or settles voluntarily in cash.

The development of the virtual shares in this program granted to management and key employees was as follows:

	<u>2018</u>	<u>2019</u>
Outstanding at the beginning of the period	59,908	49,899
Granted during the period	—	5,000
Expired during the period	(10,009)	—
Outstanding at the end of the period	<u>49,899</u>	<u>54,899</u>
Thereof vested (and expensed)	49,899	54,899

The 5,000 virtual shares awarded in April 2019 (2018: none) were to the management.

As of December 31, 2019, and 2018, none of the virtual shares of the Prior VSOP are exercisable because an exit event or capital market transaction has not occurred.

(Expense) / benefit recognized in the statement of operations and other comprehensive income (loss)

The (expense) / benefit recognized for share-based payment plans during 2018 and 2019 is as follows:

	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Research and development expenses	4,229	—
General and administrative expenses	21	(6,074)
Total	<u>4,250</u>	<u>(6,074)</u>

Refer to Note 3 for further information regarding the benefit recognized in 2018.

Measurement of Fair Values

The grant date fair value of the 5,000 virtual shares granted on April 18, 2019 was derived from the estimated equity value of CureVac on that date because the beneficiary is entitled to shares of CureVac for nominal amount in the case of an IPO without taking into consideration the liquidation preferences of the Series B and C shares (as described in Note 8. Equity), which lead to a fair value of one virtual share of EUR 1,215 at that time.

The grant date fair value of the equity-settled virtual shares granted in prior years was estimated when the modification occurred in July 2016, based on the valuations underlying the financing round in 2016 as this was the best indicator of the grant date fair value at that time.

The vested virtual share entitlements of former employees who are not participating in the modified award are accounted for as cash-settled and are measured by reference to the Company's value at the time they left the Company.

Since all virtual shares have, in the case of an IPO, no exercise price, common inputs to option pricing models include expected volatility, risk-free interest rate, life of the virtual shares, dividends expected, and did not significantly affect the fair value of the virtual shares and the total share option expense in fiscal 2019 and 2018.

9.3 Virtual shares program II (New VSOP)

Description of the program

Effective November 25, 2019, the Group granted 5,600 share options to 11 key employees of CureVac Inc. under the New VSOP program.

The main features of this program are as follows:

- Settlement conditions:
 - Options represent a cash-claim against CureVac if proceeds generated upon an exercise event exceed the exercise price
 - If CureVac's shares are publicly listed at the time of exercise, CureVac has the discretion to fulfill such cash-claim by delivering shares
- Exercise Price: USD 825.77 per share option
- Exercise Events include:
 - an Asset-, Share- or Merger-Deal,
 - an Equity Financing: if more than 50% of the investment is by parties other than the existing shareholders, or
 - after IPO subject to lock up restrictions and applicable trading windows,
- The awards vest over a period of 4 years, which starts on date of awardee was hired by the Group, whereby:
 - 25% of the Options vest after the end of the 1st year after vesting start and
 - the remaining 75% shall vest monthly thereafter
- Term of the program: 10 years, which is also approximately the weighted-average remaining life of the option awards as of December 31, 2019

As CureVac considers an IPO-scenario most probable and has the discretion and the stated intent to settle in shares instead of cash, CureVac accounts for this program as equity-settled.

Measurement of Fair Values

An advanced Black-Scholes Model (Enhanced American Stock Option Model) has been used to measure the fair value at the grant date of November 25, 2019. The inputs used in the measurement of the fair value at grant date were as follows:

Weighted average fair value	EUR 505.48
Weighted average share price	EUR1,223.16
Exercise price (USD 825.77)	EUR 750.99
Expected volatility (%)	50.0%
Expected life (years)	1.16
Risk-free interest rate (%)	1.77%

The awards' per share exercise price is the Euro translation of November 25, 2019, which was 0.90 USD / EUR. Expected volatility was based on an evaluation of the historical volatilities of comparable listed biotech-companies over the historical period commensurate with the expected option life. The expected life of the awards was based on the assumptions that the beneficiaries would exercise their fully vested award at the first time possible (taking into account lock-up and potential trading windows restrictions). The risk-free interest was derived from US-government bonds because the granted awards were only to US employees on US territories in an IPO-scenario for a Nasdaq listed company.

Reconciliation of outstanding awards

The number of awards in this program granted to key employees in 2019 were as follows:

Outstanding at the beginning of the period	—
Granted during the period	5,600
Outstanding at the end of the period	5,600
Thereof vested	1,318
Thereof expensed	2,137

As of December 31, 2019, none of the awards are exercisable because an exit event or capital market transaction has not occurred.

Expense recognized in the statement of operations and other comprehensive income (loss)

The expense recognized for employee services received during the years ended December 31, 2019 is shown in the following table:

	<u>2019</u>
	<u>EUR k</u>
Research and development expenses	(258)
Selling and distribution expenses	(743)
General and administrative expenses	(79)
Total	<u>(1,080)</u>

9.4 Former Chief Executive Officer Grant

Description of the program

On October 14, 2019 CureVac, granted 29,053 options, which corresponded to 4 % of the outstanding share capital of the Company at that time, to Dan Menichella, the then Chief Executive Officer (CEO) of CureVac from June 20, 2018 to March 10, 2020.

The main features of this program are as follows:

- Settlement conditions:
 - Option represents a cash-claim against CureVac if the proceeds generated in an exercise event exceed the exercise price
 - If CureVac's shares are publicly listed at the exercise date, CureVac has the discretion to fulfill such cash-claim by delivering shares, subject to further details
 - Exercise Price: USD 1,101.03 per share option
 - Exercise Events: The options are exercisable at any time, if the Exercise Price is exceeded in case of:
 - a financing round at the level of the Company if and to the extent more than 50 % of the funds raised per any financing round (equity or non-equity) are contributed by parties other than the existing shareholders subject to further conditions, especially minimum amounts, or
 - a Change of Control of the Company, or
 - an IPO of the Company, or
 - no later than September 11, 2020, subject to further conditions,
- and
- subject to applicable law and corporate governance rules after the respective vesting as described below and, in any case, not later than 10 years after the effective date, i.e. all options that are not exercised by June 20, 2028 expire without replacement and without compensation, which is also considered the remaining life of the options of 8.69 years as of December 31, 2019
 - Vesting period of 4 years, whereby:
 - 25% of the Options vest one year following the original effective date of January 8, 2017 and

- the remainder shall vest on the last day of each successive month thereafter, provided that the beneficiary remains employed by the company on vesting
- Options, once vested, are non-forfeitable.
- Furthermore, subject to the approval of the supervisory board of the company, the awards will vest in full (accelerated vesting) in the case a change of control or if the beneficiary leads the company to an IPO or a merger into a company listed at an internationally recognized stock market
- Options not yet vested lapse if the service agreement is terminated by the beneficiary. However, unvested options vest immediately if the Company terminates the service agreement, subject to further conditions.

As CureVac considers an IPO-scenario most probable and has the discretion and the stated intent to settle in shares instead of cash, CureVac accounts for this program as equity-settled as of December 31, 2019. Refer to Note 20 regarding the vesting of this award subsequent to December 31, 2019.

Measurement of Fair Values

An advanced Black-Scholes Model (Enhanced American Stock Option Model) has been used to measure the fair value at the grant date of October 14, 2019. The inputs used in the measurement of the fair value at grant date were as follows:

Weighted average fair value	EUR 514.93
Weighted average share price	EUR 1,223.16
Exercise price (USD 1,101.03)	EUR 998.38
Expected volatility (%)	50.0%
Expected life (years)	4.77
Risk-free interest rate(%)	1.71%

The options' per share exercise price is the Euro translation of October 14, 2019, which was 0.91 USD/EUR. Expected volatility was based on an evaluation of the historical volatilities of comparable listed biotech-companies over the historical period commensurate with the expected option life. The expected option life was based on the assumptions that the beneficiary would exercise his option in equal instalments from the date of the first time possible (taking into account lock-up and potential trading windows restrictions) until maturity. The risk-free interest was derived from US-Government bonds because the options were granted only to a US beneficiary on US territories in an IPO-scenario for a Nasdaq listed company.

Reconciliation of outstanding options

The number of options in this program granted to the beneficiary in 2019 were as follows:

Outstanding at the beginning of the period	—
Granted during the period	29,053
Outstanding at the end of the period	29,053
Thereof vested	21,184
Thereof expensed	24,099

As of December 31, 2019, none of the options are exercisable because an exit event or capital market transaction has not occurred.

Expense recognized in the statement of operations and other comprehensive income (loss)

The expense recognized for services received during the years ended December 31, 2019 is shown in the following table:

	<u>2019</u>
	<u>EUR k</u>
General and administrative expenses	(12,409)
Total	<u>(12,409)</u>

10. Trade and other payables

Trade payables and other payables are all due within one year and include the following:

	<u>2018</u>	<u>2019</u>
	<u>EUR k</u>	<u>EUR k</u>
Trade payables	(9,029)	(5,331)
License fees payable	(501)	(537)
Miscellaneous liabilities	(1,383)	(607)
Total	<u>(10,913)</u>	<u>(6,475)</u>

There is no concentration of risk. Miscellaneous liabilities consist mainly of payroll-related and withholding taxes of EUR 104k (2018: EUR 893k) and of other payroll taxes and social liabilities of EUR 504k (2018: EUR 490k).

11. Other liabilities

Other current liabilities include the following:

	<u>2018</u>	<u>2019</u>
	<u>EUR k</u>	<u>EUR k</u>
Accrued bonuses	1,903	2,477
Accrued vacation	682	780
Outstanding invoices	6,812	3,478
Professional fees	292	578
Grants from government agencies and similar bodies	1,186	4,148
Other	271	554
Total	<u>11,146</u>	<u>12,015</u>

In fiscal 2019 EUR 5,385k (2018: EUR 808k) of the grants from government agencies and similar bodies were recognized as other operating income.

12. Convertible loans

Dietmar Hopp (or the "Lender"), principal of dievini Hopp BioTech holding GmbH & Co. KG (dievini), the majority shareholder of the Group, granted on May 3, 2019 a loan (facility) fully convertible into equity of EUR 50,000k to CureVac (or the "Borrower"). Under the facility, CureVac had the right to use the loan in total or in tranches until March 1, 2020.

The loan was granted for an indefinite term and bears interest in the amount of 8.0% per annum. CureVac drew down the loan facility in tranches of

- EUR 20,000k at May 29, 2019
- EUR 20,000k at July 23, 2019 and

- EUR 10,000k at September 10, 2019

On October 24, 2019, the loan agreement was modified and fully replaced with a second loan agreement under which, in addition to the already disbursed amount of EUR 50,000k under the first loan, the lender granted the Borrower a second loan with a conversion option in a nominal amount of EUR 63,927k (equivalent to USD 70,000k calculated on the basis of the exchange rate applicable at the date of signing the modified agreement). Under the modified agreement, the interest on both loans is 8.0% per annum, is added to the amount of the loans and is due with the loans at maturity; compound interest is not due.

CureVac has the right to use this Second Loan until December 31, 2021, if its cash balance falls below EUR 15,000k, in two tranches of EUR 20,000k and one final tranche of EUR 23,927k.

CureVac had drawn the first tranche of this second loan in the amount of USD 22,000k (EUR 19,888k) at December 19, 2019. As of December 31, 2019, the loans had accrued interest of EUR 1,960k.

According to the loan agreement in order to avoid the risk of indebtedness of the Borrower, the Lender subordinated its claim of repayment of the loans to all existing and future claims of the other creditors of the Borrower.

The potential effects the statement of operations resulting from foreign exchange fluctuations from the second loan are disclosed in the sensitivity analysis in the subsection "Foreign currency risk" in Note 15.

The effect on earnings per share in the case of a conversion of the loans is discussed at Note 14.

The loans can be terminated or converted into equity at any time in full or in part, however not before December 31, 2021 unless CureVac initiates or concludes a transaction amongst shareholders, issues further convertible loans or executes a cross-over financing round in direct or indirect preparation of an IPO. Upon conversion into equity, the amount of the loans and accrued interest converted would convert into a variable number of shares of the same class and at the same price per share as those issued in the financing enabling exercise of the conversion.

13. Income tax

CureVac has tax losses in Germany that are available indefinitely for offsetting against future taxable profits of the companies in which the losses arose. Under German tax law, tax profits in a given year can be offset against tax loss carryforwards up to an amount of EUR 1,000k. 60% of tax profit in excess of this amount can be offset against any remaining tax loss carryforwards. As a result, 40% of the profits in excess of EUR 1,000k are subject to taxation.

Tax loss carryforwards are examined by the German taxation authorities and may be adjusted. Furthermore, significant changes in the shareholder and company structure can lead to a reduction in the loss carryforwards under the current provisions of German tax law, which can be used to calculate the annual amount for offsetting against the future taxable income.

In fiscal 2019 and 2018, the Group recorded a consolidated income tax benefit and expense of EUR 252k and EUR -110k, respectively. The income tax benefit in fiscal 2019 results from income tax expenses from CureVac Inc. of EUR 203k (2018: EUR 243k) and deferred tax expenses on taxable temporary differences of EUR 656k (2018: EUR 472K), which were fully offset by deferred tax benefits of EUR 1,111k (2018: EUR 605K) recognized from net operating loss carryforwards. In fiscal 2019, the Group further recorded deferred tax liabilities of EUR 2,212k (2018: EUR 0) related to taxable temporary differences on the equity component of the convertible loans recognized in capital reserve. For outside basis differences of EUR 770k (2018: EUR 397k) which are indefinitely reinvested and associated with investments in subsidiaries, deferred tax liabilities have not been recognized.

The significant components of income tax for the years ending December 31, 2019 and 2018 were as follows:

Tax reconciliation:

	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Loss before tax	(71,131)	(100,125)
Expected tax benefit (based on statutory tax rate of 29.13% in 2019 and 2018)	20,744	29,162
Adjustments in respect of current income tax of previous years	42	—
Effects from differences between Group and local tax rates	10	8
Effects resulting from non-recognition of tax loss carryforwards	(22,428)	(22,836)
Effects resulting from non-recognition of DTA/DTL	—	—
First-time-recognition of tax loss carryforwards	430	—
Non-deductible expenses for tax purposes		
– Effects from non-deductible share-based-payments	1,209	(5,698)
– Effects from (additions/ deductions) for local trade taxes	(65)	(191)
– Other non-deductible expenses	(53)	(78)
Other effects	—	(114)
Effective tax benefit/ (expense)	(110)	252

The following unused tax losses had been carried forward as of the end of the reporting periods:

<u>Tax loss carryforwards</u>	<u>2018</u>	<u>2019</u>
	EUR k	EUR k
Unused tax losses for corporate income tax	330,753	407,434
Unused tax losses for trade tax	329,210	405,123

Deferred tax assets on tax loss carryforwards and deductible temporary differences in excess of taxable temporary differences have not been capitalized as management concluded that there is not sufficient probability as per IAS 12 that there will be future taxable profits available in the foreseeable future against which the unused tax losses can be utilized. The accumulated unused tax losses relate entirely to Germany.

14. Earnings per share

Earnings per share is calculated pursuant to *IAS 33 Earnings per Share* by dividing the consolidated net loss in CureVac AG by the average weighted number of shares outstanding in the fiscal period.

There were no share issuances in fiscal 2018 and 2019 and, therefore, the weighted number of shares outstanding was 726,592 in both of these periods. This has led to basic loss per share of EUR 137.45 for fiscal 2019 and of EUR 98.05 for fiscal 2018.

The 5,282 share options granted to members of management described under Note 9 as well as the new issue of 16,345 shares in fiscal 2020 are potential ordinary shares for the purpose of calculating diluted earnings per share. Since the conversion of the options to ordinary shares and the issue of the new shares at the beginning of fiscal would decrease loss per share in fiscal 2019 and 2018, they are considered antidilutive. Therefore, the diluted earnings per share equals basic earnings per share in fiscal 2019 and 2018.

The same considerations should be taken into account for the potentially issuable 51,265 shares under the New VSOP described under Note 9. as well as the convertible loan granted in fiscal 2019 and described under Note 12.

15. Disclosure of financial instruments and risk management

Type and management of financial risks

General information

CureVac is exposed to certain financial risks with respect to its assets and liabilities and the transactions associated with its business model. These risks generally relate to credit risks, liquidity risks and market risks (including currency risk, interest rate risk and price risk).

The aim of risk management is to limit the potential negative impact on expected cash flows and take advantage of any opportunities that arise. As a result, the management of CureVac assesses at least once a year whether risks have changed and whether the measures in place to limit risk are still sufficient.

Credit risk

Credit risk is managed by CureVac's finance department. Credit risk arises from cash and cash equivalents and other financial assets, including deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and contract assets. Cash deposits and investments are placed only with reputable financial institutions with a credit rating of not less than A- (Standard & Poor's), A3 (Moody's) or A- (Fitch). Credit risk is further limited by investing only in liquid instruments.

CureVac is also exposed to a credit risk for all receivables and contract assets. Counterparty credit limits are reviewed by CureVac's Management Board on an annual basis and may be updated throughout the year. The limits are set to minimize the concentration of risks and therefore mitigate financial loss through a counterparty's potential failure to make payments. The Group manages its credit risk with customers by closely monitoring its receivables. The risk of default is considered to be low because the structure of customers consists of reputable collaborating parties and government grantors. Receivables management and financial accounting incorporates monitoring of payments received and any overdue receivables.

The carrying amount of other financial assets recognized determines the maximum theoretical credit risk. As of the end of fiscal 2019, available funds are deposited at two reputable financial institutions.

In connection with cash and cash equivalents, (other) financial assets, trade receivables and contract assets, CureVac uses the simplified approach under IFRS 9 in determining the loss allowance at an amount equal to the lifetime expected credit losses. As of December 31, 2019, the loss allowance for the "expected credit losses" totaled to EUR 76k (2018: EUR 447k), resulting in an effect recognized in profit and loss in the consolidated statement of operations and other comprehensive income in fiscal 2019 of EUR 371k (2018: EUR 264k).

Liquidity risk

In order to safeguard liquidity, the Group invests funds not required immediately for operating purposes in short-term investments at banks with high standing and call-deposit accounts with maturity up to three months. Liquidity risks are therefore expected to be low. The Group does not enter into trading of financial instruments and monitors its risk of a shortage of funds using a liquidity planning tool.

Historically, CureVac has relied on financing from shareholders and collaborators in order to ensure sufficient liquidity. Lack of external financial support could pose a risk of going concern. The liquidity management of CureVac ensures the availability of cash and cash equivalents for operational activities and further investments through appropriate budget planning.

Ultimately, the responsibility for liquidity risk management lies with management, who has established an appropriate approach to managing short-, medium- and long-term financing and liquidity requirements. CureVac manages liquidity risks by holding appropriate reserves, as well as by monitoring forecasted and actual cash flows and reconciling the maturity profiles of financial assets and liabilities.

The table below summarizes the maturity profile of the Group's financial liabilities based on contractual undiscounted payments:

2019	less than 3 months EURk	3 to 12 months EURk	1 to 5 years EURk	> 5 years EURk	Total EURk
Convertible loans	—	—	(83,940)	—	(83,940)
Lease liabilities (Note 2)	(732)	(1,985)	(9,192)	(5,086)	(16,995)
Other liabilities	—	(12,015)	(362)	(167)	(12,544)
Trade and other payables	(5,938)	(537)	—	—	(6,475)
Total	(6,670)	(14,537)	(93,494)	(5,253)	(119,954)

2018	less than 3 months EURk	3 to 12 months EURk	1 to 5 years EURk	> 5 years EURk	Total EURk
Finance lease liabilities	(29)	(48)	—	—	(77)
Other liabilities	—	(11,146)	(688)	(175)	(12,009)
Trade and other payables	(10,378)	(535)	—	—	(10,913)
Total	(10,407)	(11,729)	(688)	(175)	(22,999)

Commitments according to IAS 17 as of December 31, 2018.

2018	less than 3 months EURk	3 to 12 months EURk	1 to 5 years EURk	> 5 years EURk	Total EURk
Operating lease commitments	—	(84)	(91)	—	(175)
Rental agreements	(683)	(2,576)	(21,160)	(23,589)	(48,008)
Total	(683)	(2,660)	(21,251)	(23,589)	(48,183)

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. CureVac's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities (when revenue or expense is denominated in a foreign currency) and the amounts held as cash and cash equivalents.

CureVac AG's and CureVac Real Estate GmbH's functional currency is the Euro. The functional currency of CureVac Inc. is the USD. CureVac AG's exposure in (foreign) currency at the end of fiscal 2019 and 2018 is as follows:

	2019 (in thousands)	
Cash and cash equivalents	22,608 EUR	25,398 USD
Trade and other receivables	9,458 EUR	10,585 USD
Other receivables	105 EUR	93 GBP
	84 EUR	92 CHF
	81 EUR	91 USD
Monetary assets in foreign currency	32,336 EUR	
Trade and other payables	505 EUR	567 USD
	219 EUR	186 GBP
	10 EUR	11 CHF
Monetary liabilities in foreign currency	734 EUR	

	2018 (in thousands)	
Cash and cash equivalents	16,941 EUR	19,398 USD
Trade and other receivables	2,059 EUR	3,374 USD
Monetary assets in foreign currency	19,000 EUR	22,772 USD
Trade and other payables	8,002 EUR	9,162 USD
	132 EUR	118 GBP
	46 EUR	51 CHF
Monetary liabilities in Foreign Currency	8,180 EUR	

As shown in the tables above, CureVac AG is exposed to a significant currency risk only in relation to the USD. Therefore, a foreign currency sensitivity analysis is only presented in respect to the net exposure in USD at fiscal year ends. CureVac's net exposure in USD is the difference between monetary assets in USD and monetary liabilities in USD and developed as follows:

Net exposure in USD

2018 (1 EUR = 1.1450 USD)

EUR 10,544k from USD 13,090k

2019 (1 EUR = 1.1234 USD)

EUR 30,656k from USD 34,400k

At December 31, 2019, if the EUR had weakened 10 per cent against the US dollar with all other variables held constant, pre-tax loss for the year would have been EUR 3,406k (2018: EUR 1,172k) lower and post-tax loss would have been EUR 2,414k (2018: EUR 831k). Conversely, if the EUR had strengthened 10 per cent against the US dollar with all other variables held constant, pre-tax loss would have been EUR 2,787k (2018: EUR 959k) higher and post-tax loss would have been EUR 1,975k (2018: EUR 680k) higher. The effects on pre- and post-tax loss and (accumulated) other comprehensive income due to fact that CureVac Inc's functional currency is the USD would still have been immaterial at December 31, 2019.

CureVac did not have derivatives in fiscal 2018. Refer to Note 3 for discussion regarding a USD 10,000k forward contract in fiscal 2019.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. CureVac's exposure to the risk of changes in market interest rates relates primarily to the CureVac's cash and cash equivalents with floating interest rates. Due to persistent low-interest-rates CureVac might be exposed to the risk of being charged negative interest rates on its bank deposits.

If interest rates as of December 31, 2019 had been 1% higher while all other variables had remained the same, the net loss for the year (before and after tax) would have been EUR 307k (2018: EUR 218k) lower because the higher interest income would have been generated from floating rates on invested cash and cash equivalents. Because interest rates on cash and cash equivalents as of December 31, 2019 and 2018 had been almost near zero, lower interest rates would have had an immaterial effect on the net loss for the year (before and after tax) and on other comprehensive income.

Fair value measurement

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized with the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Inputs use quoted prices in active markets for identical assets or liabilities
- Level 2 — Inputs are inputs, other than quoted prices included in Level 1, which are directly or indirectly observable

- Level 3 — Inputs are unobservable and have values estimated by management based on market participant assumptions which are reasonably available

All financial instruments are measured at amortized cost at December 31, 2019 and December 31, 2018. Apart from this, liabilities from licenses agreements (i.e. acquired intangible assets) of EUR 848k (2018: EUR 850k), are classified as financial liabilities at fair value through profit or loss under the Level 2 input factors. Management assessed that the fair values of cash and cash equivalents, short-term investments, trade receivables and other financial assets, trade payables and other current liabilities as well as liabilities from licensing agreement approximate their carrying amounts. Moreover, management assessed that the potential differences between carrying amounts and fair value of liabilities to banks, (finance) lease liabilities and the liabilities for licensing agreements should be immaterial.

As of December 31, 2019, the amortized cost of the convertible loans approximate their fair value as the loans were agreed and drawn down on recently and there have been no significant changes in relevant interest rates since the agreement date. For further information regarding the convertible loan, see Note 13.

Capital management

For the purpose of CureVac's capital management, capital includes share capital and all other equity reserves attributable to the equity holders. The primary objective of CureVac's capital management is to maximize the shareholder value through investment in the development activities of the Group.

Based on its business as an active research Group, CureVac has to rely almost exclusively on debt and equity funding by its shareholders until the Group can refinance itself in the future from marketable products as a result of successful development projects.

The Group's finance department reviews the total amount of cash of the Group on a weekly basis. As part of this review, the committee considers the total cash and cash equivalents, the cash outflow, currency translation differences and refinancing activities. The Group monitors cash using a burn rate. The cash burn rate is defined as the average monthly net cash flow from operating and investing activities during a financial year.

In meeting its financing objectives, the Group negotiates and enters into research cooperation agreements. In general, the aim is to maximize the financial resources available for further research and development projects.

CureVac is not subject to externally imposed capital requirements. The objectives of CureVac's capital management were achieved in the reporting year.

No changes were made in the objectives, policies or processes for managing cash during the years ended December 31, 2019 and 2018.

16. Notes to the consolidated statements of cash flows

Changes in liabilities arising from financing activities

CureVac uses leases to acquire the right to use assets for a specified amount of time. Due to the first-time adoption of IFRS 16, lease liabilities at an amount of EUR 15,810k were recognized as of January 1, 2019. The liability arising from leases amounts to EUR 14,130k as of December 31, 2019.

in thousands of EUR	January 1, 2019	Cash flows	Reclassification	New leases	Accrued interest	Foreign Exchange Movements	December 31, 2019
Convertible loans	—	69,889	(7,604)	—	2,733	—	65,018
Lease liabilities	15,810	(1,910)	—	153	—	77	14,130
Total liabilities from financing activities	15,810	67,979	(7,604)	153	2,733	77	79,148

The reclassification of €7,604k results from an amount recorded as a component of equity. See Note 12.

in thousands of EUR	January 1, 2018	Changes from financing cash flows	December 31, 2018
Lease liabilities	188	(112)	77
Total liabilities from financing activities	<u>188</u>	<u>(112)</u>	<u>77</u>

17. Commitments and contingencies

In the course of its ordinary activities, no major claims have been made against the Company.

See Section “Changes in accounting policies and disclosures” for commitments and contingencies relating to IFRS 16 (Leases).

18. Remuneration of the Company’s key management personnel

Total remuneration of key management personnel

Remuneration of the Company’s key management personnel was as follows in fiscal 2019:

Remuneration of key management in 2019	Management Board	Supervisory Board
	EUR k	EUR k
Short-term benefits	3,166	521
Share-based payments	18,483	—
Total	<u>21,649</u>	<u>521</u>

The amounts disclosed in the table are the amounts recognized as an expense during the reporting period related to key management personnel.

The figures for fiscal 2018 were as follows:

Remuneration of key management in 2018	Management Board	Supervisory Board
	EUR k	EUR k
Short-term benefits	2,195	343
Total	<u>2,195</u>	<u>343</u>

19. Other related party disclosures

dievini Hopp BioTech holding GmbH & Co. KG

dievini Hopp BioTech holding GmbH & Co. KG (dievini) holds the majority of the share capital of the Company, is the controlling shareholder and is the ultimate parent of the Group.

Other related party transactions

Molecular Health GmbH

Molecular Health GmbH (Molecular Health) is a wholly-owned subsidiary of dievini. In December 2017 CureVac concluded a contract with Molecular Health, according to which Molecular Health provides services in conjunction with the Modeling of the biological and clinical effects of Toll-like receptor 7 and 8 agonists in cancer and immune cells. The Group incurred EUR 0k in fiscal 2019 and EUR 30k in July 2018 in research and development expenses in connection with this contract.

Rittershaus Rechtsanwaelte

Since December 15, 2005, a consultant agreement is in place for an indefinite term with Rittershaus. The agreement can be terminated without notice by CureVac and with notice of three months to the end of the quarter by Rittershaus. In fiscal 2019, consulting fees of EUR 208k (2018: EUR 145k) were paid to the Rittershaus. Prof. Dr. Christof Hettich is a managing director of Rittershaus and dievini as well.

Dr. Ingmar Hoerr

Since June 2018, an advisory agreement between CureVac and Mr. Hoerr was in place. This contract was terminated in March 2020 after the transition of Dr. Hoerr from CureVac's supervisory board to its management board on March 10, 2020. In fiscal 2019, advisory fees of EUR 240k (2018: EUR 144k) were paid to Dr. Hoerr.

Dietmar Hopp

During 2019, Dietmar Hopp, principal of dievini Hopp BioTech holding GmbH & Co. KG (dievini), the majority shareholder of the Group, granted two convertible loans to the Group; see Note 12 Convertible loans for further information.

20. Subsequent events

In January 2020, CureVac AG and CEPI announced an additional collaboration to develop a vaccine against the new coronavirus SARS-CoV-2. The aim of the cooperation is to safely advance vaccine candidates into clinical testing as quickly as possible. The agreement will build on the existing partnership between CureVac and CEPI to develop a rapid-response vaccine platform and includes additional initial funding of up to USD 8,300k by CEPI for accelerated vaccine development, manufacturing and clinical tests. For information relating to the existing collaboration with CEPI, see Note 3.

In March 2020, CureVac collected EUR 19,984k in funds due from Genmab in connection with issuance of Series B shares under the ISA and the related capital increase came into effect upon registration of the shares in the commercial register in February 2020.

On March 10, 2020, the service agreement with Dan Menichella (the then-CEO of the Group) was discontinued. As a result, at this date, 6,053 of unvested options awarded to him vested immediately.

The COVID-19 pandemic, which began in December 2019 in China and has spread worldwide, has caused many governments to implement measures to slow the spread of the outbreak through quarantines, travel restrictions, heightened border scrutiny and other measures. The Company has taken a series of actions aimed at safeguarding the Company's employees and business associates, including implementing a work-from-home policy for employees except for those related to our laboratory operations. The rapid development and fluidity of the situation presents uncertainty and risk with respect to the Company, its performance and its financial results.

Through and including _____, 2020 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares



CureVac B.V.

Common Shares

PROSPECTUS

BofA Securities

Jefferies

Credit Suisse

Kempen & Co

, 2020



PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 6. Indemnification of Directors and Officers

Under Dutch law, our managing directors and our supervisory directors may be held liable by the registrant for damages in the event of improper or negligent performance of their duties. They may be jointly and severally liable for damages to the registrant and third parties for infringement of our articles of association or certain provisions of Dutch law. In certain circumstances, they may also incur additional specific civil and criminal liabilities.

The liability of our managing directors and supervisory directors and other key employees will be covered by a directors' and officers' liability insurance policy. This policy will contain customary limitations and exclusions, such as willful misconduct or intentional recklessness (*opzet of bewuste roekeloosheid*).

Our current and former managing directors and supervisory directors (and such other current or former officer or employee as designated by the management board, subject to approval by our supervisory board) have the benefit of the following indemnification provisions in our articles of association:

Indemnified persons shall be reimbursed for:

- a. any financial losses or damages incurred by such indemnified person; and
- b. any expense reasonably paid or incurred by such indemnified person in connection with any threatened, pending or completed suit, claim, action or legal proceedings of a civil, criminal, administrative or other nature, formal or informal, in which he becomes involved, in each case to the extent this relates to his current or former position with us and/or a group company and in each case to the extent permitted by applicable law.

No indemnification shall be given to an indemnified person:

- a. if a competent court or arbitral tribunal has established, without having (or no longer having) the possibility for appeal, that the acts or omissions of such indemnified person that led to the financial losses, damages, expenses, suit, claim, action or legal proceedings as described above are of an unlawful nature (including acts or omissions, which are considered to constitute malice, gross negligence, intentional recklessness and/or serious culpability attributable to such indemnified person);
- b. to the extent that his financial losses, damages and expenses are covered under insurance and the relevant insurer has settled, or has provided reimbursement for, these financial losses, damages and expenses (or has irrevocably undertaken to do so);
- c. in relation to proceedings brought by such indemnified person against us, except for proceedings brought to enforce indemnification to which he is entitled pursuant to our articles of association, pursuant to an agreement between such indemnified person and us, which has been approved by the management board or pursuant to insurance taken out by us for the benefit of such indemnified person;
- d. for any financial losses, damages or expenses incurred in connection with a settlement of any proceedings effected without the our prior consent.

Under our articles of association, our management board may stipulate additional terms, conditions and restrictions in relation to the indemnification described above.

Item 7. Recent Sales of Unregistered Securities

Set forth below are the sales of all securities sold by CureVac AG within the past three years (i.e., since January 1, 2017 up to the date of this registration statement) which were not registered under the Securities Act (and in each case not giving effect to the corporate reorganization):

As registered in the commercial register on December 27, 2017, CureVac AG issued 21,078 Series B shares. In addition to the nominal value of the shares (€21,078), the shareholders made cash contributions into the our capital reserves of €45,000,000.

As registered in the commercial register on February 18, 2020, CureVac AG issued 16,345 Series B shares. In addition to the nominal value of the shares (€16,345), the shareholders made cash contributions into our capital reserves of €19,983,655.

As registered in the commercial register on July 28, 2020, CureVac AG had issued 1,123,503 Series B shares. In addition to the nominal value of the shares (€418,466.00), the shareholders are obliged to make cash contributions into our capital reserves within 15 banking days after the registration of the capital increase which has occurred on July 27, 2020 in the amount of €558,861,343.00.

The issuances of restricted securities in the transactions described above were deemed to be exempt from registration under the Securities Act in reliance upon the Section 4(a)(2) of the Securities Act and/or Regulation S promulgated under the Securities Act.

Exhibits

(a) The following documents are filed as part of this registration statement:

- 1.1 Form of Underwriting Agreement.*
- [3.1 Form of Articles of Association of CureVac N.V. \(translated into English\), as they will be in effect immediately following the completion of the corporate reorganization.](#)
- [3.2 Form of internal rules of the management board of CureVac N.V., as they will be in effect immediately following the completion of the corporate reorganization.](#)
- [3.3 Form of internal rules of the supervisory board of CureVac N.V., as they will be in effect immediately following the completion of the corporate reorganization.](#)
- [3.4 Form of Share Issue Deed.**](#)
- [3.5 Investment and Shareholders' Agreement among several shareholders and CureVac AG.](#)
- [3.6 Shareholders' Agreement among Kreditanstalt für Wiederaufbau, Dievini Hopp BioTechholding GmbH & Co KG and Mr Dietmar Hopp, dated June 16, 2020.**](#)
- [3.7 Relationship Agreement among Kreditanstalt für Wiederaufbau, Dievini Hopp BioTechholding GmbH & Co KG and Mr Dietmar Hopp, dated July 17, 2020.**](#)
- [4.1 Form of Registration Rights Agreement.](#)
- [5.1 Form of opinion of NautaDutilh N.V., Dutch counsel of CureVac, as to the validity of the common shares.**](#)
- [8.1 Opinion of NautaDutilh N.V., Dutch counsel of CureVac, as to Dutch tax matters.**](#)
- [8.2 Opinion of FALK GmbH & Co KG, as to German tax matters.**](#)
- [8.3 Opinion of Davis Polk & Wardwell LLP, as to U.S. tax matters.**](#)
- [10.1 Collaboration and License Agreement by and between CureVac AG and Genmab B.V., dated December 19, 2019.†](#)
- [10.2 Development and License Agreement by and between CureVac AG and CRISPR Therapeutics AG, dated November 9, 2017.†](#)
- [10.3 Exclusive Collaboration and License Agreement by and between CureVac GmbH and Boehringer Ingelheim International GmbH, dated August 21, 2014.†](#)
- [10.4 Amendment No. 1 to Exclusive Collaboration and License Agreement by and between CureVac GmbH and Boehringer Ingelheim International GmbH, dated June 30, 2015.†**](#)

- [10.5](#) [Amendment No. 2 to Exclusive Collaboration and License Agreement by and between CureVac AG and Boehringer Ingelheim International GmbH, dated August 1, 2016.†**](#)
- [10.6](#) [Amendment No. 3 to Exclusive Collaboration and License Agreement by and between CureVac AG and Boehringer Ingelheim International GmbH, dated August 8, 2019.†**](#)
- [10.7](#) [Global Access Commitments Agreement, by and between Bill & Melinda Gates Foundation and CureVac GmbH, dated February 13, 2015.†](#)
- [10.8](#) [Definitive Agreement and Project Collaboration Plan for Assessment of RNA Vaccine Technology for Non-live Rotavirus Vaccines in Pre-clinical Models by and between Bill & Melinda Gates Foundation and CureVac GmbH, dated May 15, 2014.†**](#)
- [10.9](#) [Framework Partnering Agreement between Coalition for Epidemic Preparedness Innovations and CureVac AG, dated February 15, 2019.†**](#)
- [10.10](#) [Workpackage Statement \(Development of CureVac Outbreak Response To Novel Coronavirus \(2019-nCoV\)\) between Coalition for Epidemic Preparedness Innovations and CureVac AG, dated January 27, 2020.†**](#)
- [10.11](#) [Development and Option Agreement, between CureVac AG and Acuitas Therapeutics Inc., dated April 29, 2016.†**](#)
- [10.12](#) [Side Agreement and Amendment Number One to the Development and Option Agreement, between CureVac AG and Acuitas Therapeutics Inc., dated December 1, 2016. †](#)
- [10.13](#) [Development and Intellectual Property Agreement, between CureVac AG and Tesla Grohmann Automation GmbH, dated November 24, 2015. †**](#)
- [10.14](#) [Development and Option Agreement, between CureVac AG and Arcturus Therapeutics Inc., dated January 1, 2018.†**](#)
- [10.15](#) [Restated Amendment to Development and Option Agreement, between CureVac AG and Arcturus Therapeutics Inc., dated September 28, 2018.†**](#)
- [10.16](#) [Third Amendment to Development and Option Agreement, between CureVac AG and Arcturus Therapeutics Inc., dated July 24, 2019.†**](#)
- [10.17](#) [Convertible loan, between Mr. Dietmar Hopp and CureVac AG, dated October 24, 2019.**](#)
- [10.18](#) [Collaborative Research Agreement, between CureVac AG and Yale University, dated July 1, 2019.†**](#)
- [10.19](#) [Sponsored Research Agreement, between CureVac AG and The Schepens Eye Research Institute, Inc, dated March 15, 2019.†**](#)
- [10.20](#) [First Amendment to Sponsored Research Agreement, between CureVac AG and The Schepens Eye Research Institute, Inc, dated May 19, 2019.†**](#)
- [10.21](#) [Rental contract for commercial premises, between CureVac Real Estate GmbH and Technologieparks Tübingen-Reutlingen GmbH, dated January 31, 2018.**](#)
- [10.22](#) [Rental Contract between CureVac Real Estate GmbH and Fränkel Immobilien-Service GmbH, dated June 6, 2018.**](#)
- [10.23](#) [Supplement to the rental contract, between CureVac Real Estate GmbH and Fränkel Immobilien-Service GmbH, dated July 23, 2018.**](#)
- [10.24](#) [Second Supplement to the rental contract, between CureVac Real Estate GmbH and Fränkel Immobilien-Service GmbH, dated August 20, 2018.**](#)
- [10.25](#) [Third Supplement to the rental contract, between CureVac Real Estate GmbH and HSB Vermietungs- und Verpachtungs- GmbH & Co. KG, dated November 5, 2018.**](#)

<u>10.26</u>	<u>Fourth Supplement to the rental contract, between CureVac Real Estate GmbH and HSB Vermietungs- und Verpachtungs- GmbH & Co. KG, dated October 22, 2019.**</u>
<u>10.27</u>	<u>Form of indemnification agreement between CureVac N.V. and members of the Supervisory Board or Management Board.**</u>
<u>10.28</u>	<u>CureVac N.V. Long-Term Incentive Plan, as it will be in effect immediately following the completion of the corporate reorganization.**</u>
<u>10.29</u>	<u>Curevac Virtual Share Plan.**</u>
<u>10.30</u>	<u>Termination agreement between CureVac AG, CureVac Real Estate GmbH and Eli Lilly and Company, dated June 26, 2020.†**</u>
<u>10.31</u>	<u>Amendment to the convertible loan agreement, between Mr. Dietmar Hopp and CureVac AG, dated June 25, 2020.**</u>
<u>10.32</u>	<u>First Amendment to Collaboration and License Agreement by and between CureVac AG and Genmab B.V., dated July 2, 2020.†**</u>
<u>10.33</u>	<u>Collaboration and License Agreement by and between Curevac AG and Glaxosmithkline Biological SA, dated July 15, 2020.†**</u>
<u>10.34</u>	<u>Amendment Two to the Development and Option Agreement, between CureVac AG and Acuitas Therapeutics Inc., dated July 10, 2020.†**</u>
<u>10.35</u>	<u>Finance Fee Letter between the European Investment Bank and CureVac Real Estate GmbH, dated June 27, 2020.†</u>
<u>10.36</u>	<u>Finance Agreement between the European Investment Bank and CureVac Real Estate GmbH, dated June 27, 2020.†</u>
<u>10.37</u>	<u>Guarantee Agreement between the European Investment Bank and CureVac AG, dated June 27, 2020.†</u>
<u>14.1</u>	<u>Form of Code of Ethics of CureVac, as it will be in effect immediately following the completion of the corporate reorganization.</u>
<u>21.1</u>	<u>List of subsidiaries.**</u>
<u>23.1</u>	<u>Consent of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft.</u>
<u>23.2</u>	<u>Consent of NautaDutilh N.V. (included in Exhibits 5.1 and 8.1).**</u>
<u>23.3</u>	<u>Consent of FALK GmbH & Co KG (included in Exhibit 8.2).**</u>
<u>23.4</u>	<u>Consent of Davis Polk & Wardwell LLP (included in Exhibit 8.3).**</u>
<u>24.1</u>	<u>Powers of attorney.**</u>
<u>99.1</u>	<u>Consent of Ralf Clemens, as Supervisory Board nominee**</u>
<u>99.2</u>	<u>Consent of Mathias Hothum, as Supervisory Board nominee**</u>
<u>99.3</u>	<u>Consent of Baron Jean Stéphane, as Supervisory Board nominee**</u>
<u>99.4</u>	<u>Consent of Hans Cristoph Tanner, as Supervisory Board nominee**</u>
<u>99.5</u>	<u>Consent of Friedrich von Bohlen und Halbach, as Supervisory Board nominee**</u>
<u>99.6</u>	<u>Consent of Timothy M. Wright, as Supervisory Board nominee**</u>
<u>99.7</u>	<u>Consent of Craig A. Tooman, as Supervisory Board nominee**</u>
<u>99.8</u>	<u>Consent of Florian von der Mülbe, as Management Board nominee**</u>
<u>99.9</u>	<u>Consent of Mariola Fotin Mleczek, as Management Board nominee**</u>

[99.10](#) [Consent of Pierre Kemula, as Management Board nominee**](#)

[99.11](#) [Consent of Igor Splawski, as Management Board nominee**](#)

* To be filed by amendment.

** Previously filed

† Certain information has been excluded from the exhibit because it both (i) is not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed.

(b) Financial Statement Schedules

None.

Item 9. Undertakings

The undersigned hereby undertakes:

- (a) To provide to the underwriter at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.
- (b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the U.S. Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- (c) The undersigned registrant hereby undertakes that:
 - (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Tübingen on July 31, 2020.

CureVac B.V.

By: /s/ Franz-Werner Haas, LLD, LLM

Name: Franz-Werner Haas, LLD, LLM

Title: Chief Executive Officer

By: /s/ Pierre Kemula, B.Sc.

Name: Pierre Kemula, B.Sc.

Title: Chief Financial Officer

SIGNATURE OF AUTHORIZED U.S. REPRESENTATIVE OF REGISTRANT

Pursuant to the requirements of the Securities Act of 1933, as amended, the undersigned, the duly authorized representative in the United States of CureVac B.V. has signed this registration statement on July 31, 2020.

CureVac Inc.

/s/ Franz-Werner Haas

Name: Franz-Werner Haas

Title: Member of Board of Directors

This is a translation into English of the official Dutch version of the articles of association of a public company with limited liability under Dutch law. Definitions included in Article 1 below appear in the English alphabetical order, but will appear in the Dutch alphabetical order in the official Dutch version. In the event of a conflict between the English and Dutch texts, the Dutch text shall prevail.

ARTICLES OF ASSOCIATION

CUREVAC N.V.

DEFINITIONS AND INTERPRETATION

Article 1

1.1 In these articles of association the following definitions shall apply:

Affiliate	Any Person controlling, controlled by, or under common control with another Person, with "control" meaning directly or indirectly owning or controlling at least fifty percent (50%) of such company's voting stock, or possessing the decisive power, whether directly or indirectly, to direct or cause the direction of such company's management and policies and includes in case of KfW also the Federal Republic of Germany and its special estates (<i>Sondervermögen</i>), corporate bodies (<i>Körperschaften</i>), institutions (<i>Anstalten</i>) as well as their respective Affiliates (in relation to KfW, " KfW Affiliates ").
Article	An article of these articles of association.
CEO	The Company's chief executive officer.
Chairman	The chairman of the Supervisory Board.

Change of Control

The occurrence of any one or more of the following events with respect to dievini, as determined by the Supervisory Board:

- a. the direct or indirect change in ownership or control of dievini effected through one transaction, or a series of related transactions within a twelve-month period, as a result of which any Person or group of Persons acting in concert, directly or indirectly acquires (i) beneficial ownership of more than half of the share capital or interests of dievini and/or (ii) the ability to cast more than half of the voting rights in the shareholders' meeting (or equivalent body) of dievini;
- b. the consummation of a merger, demerger or business combination of dievini with another Person, unless such transaction results in the shares and voting interests in dievini outstanding immediately prior to the consummation of such transaction continuing to represent (either by remaining outstanding or by being converted into, or exchanged for, voting securities of the surviving or acquiring Person or a parent thereof) at least half of the voting rights in the shareholders' meeting (or equivalent body) of such surviving or acquiring Person or parent outstanding immediately after the consummation of such transaction; or
- c. the consummation of any sale, lease, exchange or other transfer to any Person or group of Persons acting in concert, in one transaction or a series of related transactions within a twelve-month period, of all or substantially all of the business of dievini,

in each case unless the Person entering into the transaction concerned is an Affiliate or an Ultimate Beneficiary of dievini.

Class Meeting

The meeting formed by the Persons with Meeting Rights with respect to shares of a certain class.

Company

The company to which these articles of association pertain.

CureVac AG

CureVac AG, registered with the Commercial Register of the Local Court in Stuttgart under HRB 754041, or its legal successors.

DCC

The Dutch Civil Code.

dievini

dievini Hopp BioTech holding GmbH & Co. KG, registered with the Commercial Register of the Local Court in Mannheim under HRA 700792, or its legal successors or permitted assigns under the SHA.

dievini Nominee

A member of the Supervisory Board appointed upon nomination by dievini pursuant to Articles 22.2 and 22.3.

Euribor

The Euribor rate (or a European reference rate that has replaced the Euribor rate) published by Thomson Reuters or another institution chosen by the Management Board, for loans with a maturity of three, six, nine or twelve months, whichever had the highest mathematical average over the financial year (or the relevant part thereof) in respect of which the relevant distribution is made, but in any event no less than zero percent.

General Meeting

The Company's general meeting.

Group Company	An entity or partnership which is organisationally connected with the Company in an economic unit within the meaning of Section 2:24b DCC.
Indemnified Officer	A current or former Managing Director or Supervisory Director or such other current or former officer or employee of the Company or its Group Companies as designated by the Management Board, subject to approval by the Supervisory Board.
Initial Approval Period	The period during which the SHA has not expired or otherwise terminated in accordance with its terms, as determined by the Supervisory Board.
Initial Nomination Period	<p>The following respective periods:</p> <ul style="list-style-type: none"> a. with respect to nomination rights of dievini under these articles of association, the period from [<i>effective date of these articles of association</i>] until the earlier of: <ul style="list-style-type: none"> i. dievini and its Affiliates and Ultimate Beneficiaries (individually or collectively) no longer holding ordinary shares representing at least ten percent (10%) of the Company's issued share capital; or ii. the occurrence of a Change of Control; b. with respect to nomination rights of KfW under these articles of association, the period from [<i>effective date of these articles of association</i>] until KfW nor any of the KfW Affiliates (individually or together with any other KfW Affiliates) no longer holds ordinary shares representing at least ten percent (10%) of the Company's issued share capital, <p>in each case as determined by the Supervisory Board.</p>
Initial Period	<p>The period from [<i>effective date of these articles of association</i>] until the earlier of:</p> <ul style="list-style-type: none"> a. dievini and its Affiliates and Ultimate Beneficiaries (individually or collectively) no longer holding shares representing at least twenty-five percent (25%) of the Company's issued share capital; or b. the occurrence of a Change of Control, <p>in each case as determined by the Supervisory Board.</p>

KfW	KfW, a public law institution (<i>Anstalt des öffentlichen Rechts</i>) under German law, having its seat in Frankfurt am Main, Germany, or its legal successors or permitted assigns under the SHA.
KfW Nominee	A member of the Supervisory Board appointed upon nomination by KfW pursuant to Articles 22.2 and 22.3.
Management Board	The Company's management board.
Management Board Rules	The internal rules applicable to the Management Board, as drawn up by the Management Board.
Managing Director	A member of the Management Board.
Meeting Rights	With respect to the Company, the rights attributed by law to the holders of depository receipts issued for shares with a company's cooperation, including the right to attend and address a General Meeting.
Nomination Concert	Any shareholder or group of shareholders acting in concert representing at least twenty percent (20%) of the Company's issued share capital, in each case excluding: <ul style="list-style-type: none"> a. dievini and its Affiliates and Ultimate Beneficiaries during the Initial Nomination Period for dievini; and b. KfW and its Affiliates during the Initial Nomination Period for KfW.
Person	A natural person, partnership, company, corporation, association with or without legal personality (<i>rechtspersoonlijkheid</i>), cooperative, mutual insurance society, foundation or any other entity or body which operates externally as an independent unit or organization, including state or governmental institutions, departments and agencies and other entities under public law.
Person with Meeting Rights	A shareholder, a usufructuary or pledgee with voting rights or a holder of depository receipts for shares issued with the Company's cooperation.

Preferred Distribution

A distribution on the preferred shares for an amount equal to the Preferred Interest Rate calculated over the aggregate amount paid up on those preferred shares, whereby:

- a. any amount paid up on those preferred shares (including as a result of an issue of preferred shares) during the financial year (or the relevant part thereof) in respect of which the distribution is made shall only be taken into account proportionate to the number of days that elapsed during that financial year (or the relevant part thereof) after the payment was made on those preferred shares;
- b. any reduction of the aggregate amount paid up on preferred shares during the financial year (or the relevant part thereof) in respect of which the distribution is made shall be taken into account proportionate to the number of days that elapsed during that financial year (or the relevant part thereof) until such reduction was effected; and
- c. if the distribution is made in respect of part of a financial year, the amount of the distribution shall be proportionate to the number of days that elapsed during that part of the financial year.

Preferred Interest Rate

The mathematical average, calculated over the financial year (or the relevant part thereof) in respect of which a distribution is made on preferred shares, of the relevant Euribor interest rate, plus a margin not exceeding five hundred basis points (500bps) to be determined by the Management Board each time when, or before, preferred shares are issued without preferred shares already forming part of the Company's issued share capital.

Record Date

The date of registration for a General Meeting as provided by law.

SHA

The Shareholders' Agreement originally entered into between KfW, dievini and Mr. Dietmar Hopp and dated the sixteenth day of June two thousand and twenty, as amended from time to time.

Simple Majority

More than half of the votes cast.

Subsidiary

A subsidiary within the meaning of Section 2:24a DCC.

Supervisory Board

The Company's supervisory board.

Supervisory Board Rules

The internal rules applicable to the Supervisory Board, as drawn up by the Supervisory Board.

Supervisory Director

A member of the Supervisory Board.

Ultimate Beneficiary

Each Person who is:

- a. an ultimate beneficiary of dievini, determined as of [*effective date of these articles of association*];
- b. a member of the immediate family of an ultimate beneficiary referred to under paragraph a. above, with "immediate family" meaning any family member by blood, marriage or adoption, not more remote than the first cousin;
- c. an Affiliate of an ultimate beneficiary referred to under paragraph a. above; or
- d. an Affiliate of a member of the immediate family of an ultimate beneficiary referred to under paragraph b. above.

Vice-Chairman

The vice-chairman of the Supervisory Board.

- 1.2 Unless the context requires otherwise, references to "shares" or "shareholders" without further specification are to shares in the Company's capital, irrespective of their class, or to the holders thereof, respectively.
- 1.3 References to statutory provisions are to those provisions as they are in force from time to time.
- 1.4 Terms that are defined in the singular have a corresponding meaning in the plural.
- 1.5 Words denoting a gender include each other gender.
- 1.6 Except as otherwise required by law, the terms "written" and "in writing" include the use of electronic means of communication.

NAME AND SEAT**Article 2**

- 2.1 The Company's name is **CureVac N.V.**
- 2.2 The Company has its corporate seat in Amsterdam.

OBJECTS**Article 3**

The Company's objects are:

- a. to incorporate, to participate in, to finance, to hold any other interest in and to conduct the management or supervision of other entities, companies and partnerships in the area of pharmaceuticals and related products;
 - b. to acquire, to manage, to invest, to exploit, to encumber and to dispose of assets and liabilities;
 - c. to furnish guarantees, to provide security, to warrant performance in any other way and to assume liability, whether jointly and severally or otherwise, in respect of obligations of Group Companies or other parties; and
 - d. to do anything which, in the widest sense, is connected with or may be conducive to the objects described above.
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SHARES - AUTHORISED SHARE CAPITAL AND DEPOSITORY RECEIPTS

Article 4

- 4.1 The Company's authorised share capital amounts to [**amount**] euro (EUR [**amount**]).
- 4.2 The authorised share capital is divided into:
- a. [**number**] ([**number**]) ordinary shares; and
 - b. [**number**] ([**number**]) preferred shares,
- each having a nominal value of twelve eurocents (EUR 0.12).
- 4.3 Until the expiration of the later of (i) the Initial Period or (ii) the Initial Approval Period, the preferred shares cannot be issued and shall not be part of the Company's issued share capital.
- 4.4 The Management Board may resolve that one or more shares are divided into such number of fractional shares as may be determined by the Management Board. Unless specified differently, the provisions of these articles of association concerning shares and shareholders apply mutatis mutandis to fractional shares and the holders thereof, respectively.
- 4.5 The Company may cooperate with the issue of depository receipts for shares in its capital.

SHARES - FORM OF SHARES AND SHARE REGISTER

Article 5

- 5.1 All shares are registered shares. The Company may issue share certificates for registered shares in such form as may be approved by the Management Board. Each Managing Director is authorised to sign any such share certificate on behalf of the Company.
- 5.2 Shares shall be numbered consecutively, starting from 1 for each class of shares.
- 5.3 The Management Board shall keep a register setting out the names and addresses of all shareholders and all holders of a usufruct or pledge in respect of shares. The register shall also set out any other particulars that must be included in the register pursuant to applicable law. Part of the register may be kept outside the Netherlands to comply with applicable local law or pursuant to stock exchange rules.
- 5.4 Shareholders, usufructuaries and pledgees shall provide the Management Board with the necessary particulars in a timely fashion. Any consequences of not, or incorrectly, notifying such particulars shall be borne by the party concerned.
- 5.5 All notifications may be sent to shareholders, usufructuaries and pledgees at their respective addresses as set out in the register.

SHARES - ISSUE

Article 6

- 6.1 Subject to Article 4.3, the Company can only issue shares pursuant to a resolution of the General Meeting or of another body authorised by the General Meeting for this purpose for a specified period not exceeding five years. When granting such authorisation, the number of shares that may be issued must be specified. The authorisation may be extended, in each case for a period not exceeding five years. Unless stipulated differently when granting the authorisation, the authorisation cannot be revoked. For as long as and to the extent that another body has been authorised to resolve to issue shares, the General Meeting shall not have this authority.
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- 6.2** In order for a resolution of the General Meeting on an issuance or an authorisation as referred to in Article 6.1 to be valid, a prior or simultaneous approval shall be required from each Class Meeting of shares whose rights are prejudiced by the issuance.
- 6.3** The preceding provisions of this Article 6 apply mutatis mutandis to the granting of rights to subscribe for shares, but do not apply in respect of issuing shares to a party exercising a previously acquired right to subscribe for shares.
- 6.4** The Company may not subscribe for shares in its own capital.

SHARES - PRE-EMPTION RIGHTS

Article 7

- 7.1** Upon an issue of shares, each holder of ordinary shares shall have a pre-emption right in proportion to the aggregate nominal value of his ordinary shares. No pre-emption rights are attached to preferred shares.
- 7.2** In deviation of Article 7.1, holders of ordinary shares do not have pre-emption rights in respect of:
- a.** preferred shares;
 - b.** shares issued against non-cash contribution; or
 - c.** shares issued to employees of the Company or of a Group Company.
- 7.3** The Company shall announce an issue with pre-emption rights and the period during which those rights can be exercised in accordance with applicable law.
- 7.4** Pre-emption rights may be exercised for a period of at least two weeks after the date of announcement in accordance with applicable law.
- 7.5** Pre-emption rights may be limited or excluded by a resolution of the General Meeting or of the body authorised as referred to in Article 6.1, if that body was authorised by the General Meeting for this purpose for a specified period not exceeding five years. The authorisation may be extended, in each case for a period not exceeding five years. Unless stipulated differently when granting the authorisation, the authorisation cannot be revoked. For as long as and to the extent that another body has been authorised to resolve to limit or exclude pre-emption rights, the General Meeting shall not have this authority.
- 7.6** A resolution of the General Meeting to limit or exclude pre-emption rights, or to grant an authorisation as referred to in Article 7.5, shall require a majority of at least two thirds of the votes cast if less than half of the issued share capital is represented at the General Meeting.
- 7.7** The preceding provisions of this Article 7 apply mutatis mutandis to the granting of rights to subscribe for shares, but do not apply in respect of issuing shares to a party exercising a previously acquired right to subscribe for shares.
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SHARES - PAYMENT

Article 8

- 8.1** Without prejudice to Section 2:80(2) DCC, the nominal value of a share and, if the share is subscribed for at a higher price, the difference between these amounts must be paid up upon subscription for that share. However, it may be stipulated that part of the nominal value of a preferred share, not exceeding three quarters thereof, need not be paid up until the Company has called for payment. The Company shall observe a reasonable notice period of at least one month with respect to any such call for payment.
- 8.2** Shares must be paid up in cash, except to the extent that payment by means of a contribution in another form has been agreed.
- 8.3** Payment in a currency other than the euro can only be made with the Company's consent. Where such a payment is made, the payment obligation is satisfied for the amount in euro for which the paid amount can be freely exchanged. Without prejudice to the last sentence of Section 2:80a(3) DCC, the date of the payment determines the exchange rate.

SHARES - FINANCIAL ASSISTANCE

Article 9

- 9.1** The Company may not provide security, give a price guarantee, warrant performance in any other way or commit itself jointly and severally or otherwise with or for others with a view to the subscription for or acquisition of shares or depository receipts for shares in its capital by others. This prohibition applies equally to Subsidiaries of the Company.
- 9.2** The Company and its Subsidiaries may not provide loans with a view to the subscription for or acquisition of shares or depository receipts for shares in the Company's capital by others, unless the Management Board resolves to do so and Section 2:98c DCC is observed.
- 9.3** The preceding provisions of this Article 9 do not apply if shares or depository receipts for shares are subscribed for or acquired by or for employees of the Company or of a Group Company.

SHARES - ACQUISITION OF OWN SHARES

Article 10

- 10.1** The acquisition by the Company of shares in its own capital which have not been fully paid up shall be null and void.
- 10.2** The Company may only acquire fully paid up shares in its own capital for no consideration or if and to the extent that the General Meeting has authorised the Management Board for this purpose and all other relevant statutory requirements of Section 2:98 DCC are observed.
- 10.3** An authorisation as referred to in Article 10.2 remains valid for no longer than eighteen months. When granting such authorisation, the General Meeting shall determine the number of shares that may be acquired, how they may be acquired and within which range the acquisition price must be. An authorisation shall not be required for the Company to acquire ordinary shares in its own capital in order to transfer them to employees of the Company or of a Group Company pursuant to an arrangement applicable to them, provided that these ordinary shares are included on the price list of a stock exchange.
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- 10.4** Without prejudice to Articles 10.1 through 10.3, the Company may acquire shares in its own capital for cash consideration or for consideration satisfied in the form of assets. In the case of a consideration being satisfied in the form of assets, the value thereof, as determined by the Management Board, must be within the range stipulated by the General Meeting as referred to in Article 10.3.
- 10.5** The previous provisions of this Article 10 do not apply to shares acquired by the Company under universal title of succession.
- 10.6** In this Article 10, references to shares include depository receipts for shares.

SHARES - REDUCTION OF ISSUED SHARE CAPITAL

Article 11

- 11.1** The General Meeting can resolve to reduce the Company's issued share capital by cancelling shares or by reducing the nominal value of shares by virtue of an amendment to these articles of association. The resolution must designate the shares to which the resolution relates and it must provide for the implementation of the resolution.
- 11.2** A resolution to cancel shares can only relate to:
- a.** shares held by the Company itself or in respect of which the Company holds the depository receipts; and
 - b.** all preferred shares, with repayment of the amounts paid up in respect thereof and provided that, to the extent allowed under Articles 35.1 and 35.2, a distribution is made on those preferred shares, in proportion to the amounts paid up on those preferred shares, immediately prior to such cancellation becoming effective, for an aggregate amount of:
 - i.** the total of all Preferred Distributions (or parts thereof) in relation to financial years prior to the financial year in which the cancellation occurs, to the extent that these should have been distributed but have not yet been distributed as described in Article 37.1; and
 - ii.** the Preferred Distribution calculated in respect of the part of the financial year in which the cancellation occurs, for the number of days that have elapsed during such part of the financial year.
- 11.3** A resolution to reduce the Company's issued share capital, shall require a prior or simultaneous approval from each Class Meeting of shares whose rights are prejudiced. However, if such a resolution relates to preferred shares, such resolution shall always require the prior or simultaneous approval of the Class Meeting concerned.
- 11.4** A resolution of the General Meeting to reduce the Company's issued share capital shall require a majority of at least two thirds of the votes cast if less than half of the issued share capital is represented at the General Meeting. The previous sentence applies mutatis mutandis to a resolution as referred to in Article 11.3.
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SHARES - ISSUE AND TRANSFER REQUIREMENTS

Article 12

- 12.1** Except as otherwise provided or allowed by applicable law, the issue or transfer of a share shall require a deed to that effect and, in the case of a transfer and unless the Company itself is a party to the transaction, acknowledgement of the transfer by the Company.
- 12.2** The acknowledgement shall be set out in the deed or shall be made in such other manner as prescribed by law.
- 12.3** For as long as any ordinary shares are admitted to trading on the New York Stock Exchange, the NASDAQ Stock Market or on any other regulated stock exchange operating in the United States of America, the laws of the State of New York shall apply to the property law aspects of the ordinary shares reflected in the register administered by the relevant transfer agent, without prejudice to the applicable provisions of Chapters 4 and 5 of Title 10 of Book 10 DCC.

SHARES - USUFRUCT AND PLEDGE

Article 13

- 13.1** Shares can be encumbered with a usufruct or pledge. The creation of a pledge on preferred shares shall require the prior approval of the Management Board.
- 13.2** The voting rights attached to a share which is subject to a usufruct or pledge vest in the shareholder concerned.
- 13.3** In deviation of Article 13.2:
- a.** the holder of a usufruct or pledge on ordinary shares shall have the voting rights attached thereto if this was provided when the usufruct or pledge was created; and
 - b.** the holder of a usufruct or pledge on preferred shares shall have the voting rights attached thereto if this was provided when the usufruct or pledge was created and this was approved by the Management Board.
- 13.4** Usufructuaries and pledgees without voting rights shall not have Meeting Rights. Shareholders without voting rights as a result of a usufruct or pledge shall have Meeting Rights.

SHARES - TRANSFER RESTRICTIONS

Article 14

- 14.1** A transfer of preferred shares shall require the prior approval of the Management Board. A shareholder wishing to transfer preferred shares must first request the Management Board to grant such approval. A transfer of ordinary shares is not subject to transfer restrictions under these articles of association.
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- 14.2** A transfer of the preferred shares to which the request for approval relates must take place within three months after the approval of the Management Board has been granted or is deemed to have been granted pursuant to Article 14.3.
- 14.3** The approval of the Management Board shall be deemed to have been granted:
- a.** if no resolution granting or denying the approval has been passed by the Management Board within three months after the Company has received the request for approval; or
 - b.** if the Management Board, when denying the approval, does not notify the requesting shareholder of the identity of one or more interested parties willing to purchase the relevant preferred shares.
- 14.4** If the Management Board denies the approval and notifies the requesting shareholder of the identity of one or more interested parties, the requesting shareholder shall notify the Management Board within two weeks after having received such notice whether:
- a.** he withdraws his request for approval, in which case the requesting shareholder cannot transfer the relevant preferred shares; or
 - b.** he accepts the interested party(ies), in which case the requesting shareholder shall promptly enter into negotiations with the interested party(ies) regarding the price to be paid for the relevant preferred shares.
- If the requesting shareholder does not notify the Management Board of his choice in a timely fashion, he shall be deemed to have withdrawn his request for approval, in which case he cannot transfer the relevant preferred shares.
- 14.5** If an agreement is reached in the negotiations referred to in Article 14.4 paragraph b. within two weeks after the end of the period referred to in Article 14.4, the relevant preferred shares shall be transferred for the agreed price within three months after such agreement having been reached. If no agreement is reached in these negotiations in a timely fashion:
- a.** the requesting shareholder shall promptly notify the Management Board thereof; and
 - b.** the price to be paid for the relevant preferred shares shall be equal to the value thereof, as determined by one or more independent experts to be appointed by the requesting shareholder and the interested party(ies) by mutual agreement.
- 14.6** If no agreement is reached on the appointment of the independent expert(s) as referred to in Article 14.5 paragraph b. within two weeks after the end of the period referred to in Article 14.5:
- a.** the requesting shareholder shall promptly notify the Management Board thereof; and
 - b.** the requesting shareholder shall promptly request the president of the district court in whose district the Company has its corporate seat to appoint three independent experts to determine the value of the relevant preferred shares.
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- 14.7** If and when the value of the relevant preferred shares has been determined by the independent expert(s), irrespective of whether he/they was/were appointed by mutual agreement or by the president of the relevant district court, the requesting shareholder shall promptly notify the Management Board of the value so determined. The Management Board shall then promptly inform the interested party(ies) of such value, following which the/each interested party may withdraw from the sale procedure by giving notice thereof to the Management Board within two weeks.
- 14.8** If any interested party withdraws from the sale procedure in accordance with Article 14.7, the Management Board:
- a.** shall promptly inform the requesting shareholder and the other interested party(ies), if any, thereof; and
 - b.** shall give the opportunity to the/each other interested party, if any, to declare to the Management Board and the requesting shareholder, within two weeks, his willingness to acquire the preferred shares having become available as a result of the withdrawal, for the price determined by the independent expert(s) (with the Management Board being entitled to determine the allocation of such preferred shares among any such willing interested party(ies) at its absolute discretion).
- 14.9** If it becomes apparent to the Management Board that all relevant preferred shares can be transferred to one or more interested parties for the price determined by the independent expert(s), the Management Board shall promptly notify the requesting shareholder and such interested party(ies) thereof. Within three months after sending such notice the relevant preferred shares shall be transferred.
- 14.10** If it becomes apparent to the Management Board that not all relevant preferred shares can be transferred to one or more interested parties for the price determined by the independent expert(s):
- a.** the Management Board shall promptly notify the requesting shareholder thereof; and
 - b.** the requesting shareholder shall be free to transfer all relevant preferred shares, provided that the transfer takes place within three months after having received the notice referred to in paragraph a.
- 14.11** The Company may only be an interested party under this Article 14 with the consent of the requesting shareholder.
- 14.12** All notices given pursuant to this Article 14 shall be provided in writing.
- 14.13** The preceding provisions of this Article 14 do not apply:
- a.** to the extent that a shareholder is under a statutory obligation to transfer preferred shares to a previous holder thereof;
 - b.** if it concerns a transfer in connection with an enforcement of a pledge pursuant to Section 3:248 DCC in conjunction with Section 3:250 or 3:251 DCC; or
 - c.** if it concerns a transfer to the Company, except in the case that the Company acts as an interested party pursuant to Article 14.11.
- 14.14** This Article 14 applies mutatis mutandis in case of a transfer of rights to subscribe for preferred shares.
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MANAGEMENT BOARD - COMPOSITION

Article 15

- 15.1** The Company has a Management Board consisting of one or more Managing Directors, provided that, during the Initial Period, the Management Board shall consist of up to six (6) Managing Directors. The Management Board shall be composed of individuals.
- 15.2** The Supervisory Board shall determine the number of Managing Directors.
- 15.3** The Supervisory Board shall elect a Managing Director to be the CEO. The Supervisory Board may dismiss the CEO, provided that the Managing Director so dismissed shall subsequently continue his term of office as a Managing Director without having the title of CEO.
- 15.4** If a Managing Director is absent or incapacitated, he may be replaced temporarily by a person whom the Management Board has designated for that purpose and, until then, the other Managing Director(s) shall be charged with the management of the Company. If all Managing Directors are absent or incapacitated, the management of the Company shall be attributed to the Supervisory Board. The person(s) charged with the management of the Company in this manner, may designate one or more persons to be charged with the management of the Company instead of, or together with, such person(s).
- 15.5** A Managing Director shall be considered to be unable to act within the meaning of Article 15.4:
- a.** during the existence of a vacancy on the Management Board, including as a result of:
 - i.** his death;
 - ii.** his dismissal by the General Meeting, other than at the proposal of the Supervisory Board; or
 - iii.** his voluntary resignation before his term of office has expired;
 - iv.** not being reappointed by the General Meeting, notwithstanding a (binding) nomination to that effect by the Supervisory Board, provided that the Supervisory Board may always decide to decrease the number of Managing Directors such that a vacancy no longer exists; or
 - b.** during his suspension;
 - c.** in a period during which the Company has not been able to contact him (including as a result of illness), provided that such period lasted longer than five consecutive days (or such other period as determined by the Supervisory Board on the basis of the facts and circumstances at hand); or
 - d.** in connection with and during the deliberations and decision-making of the Management Board on matters in relation to which he has declared to have, or in relation to which the Supervisory Board has established that he has, a conflict of interests as described in Article 18.6.
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MANAGEMENT BOARD - APPOINTMENT, SUSPENSION AND DISMISSAL

Article 16

- 16.1** The General Meeting shall appoint the Managing Directors and may at any time suspend or dismiss any Managing Director. In addition, the Supervisory Board may at any time suspend a Managing Director. A suspension by the Supervisory Board can at any time be lifted by the General Meeting.
- 16.2** The General Meeting can only appoint Managing Directors upon a nomination by the Supervisory Board. The General Meeting may at any time resolve to render such nomination to be non-binding by a Simple Majority representing at least one third of the issued share capital. If a nomination is rendered non-binding, a new nomination shall be made by the Supervisory Board. If the nomination comprises one candidate for a vacancy, a resolution concerning the nomination shall result in the appointment of the candidate, unless the nomination is rendered non-binding. A second meeting as referred to in Section 2:120(3) DCC cannot be convened.
- 16.3** At a General Meeting, a resolution to appoint a Managing Director can only be passed in respect of candidates whose names are stated for that purpose in the agenda of that General Meeting or the explanatory notes thereto.
- 16.4** A resolution of the General Meeting to suspend or dismiss a Managing Director shall require a majority of at least two thirds of the votes cast representing more than half of the issued share capital, unless the resolution is passed at the proposal of the Supervisory Board. A second meeting as referred to in Section 2:120(3) DCC cannot be convened.
- 16.5** If a Managing Director is suspended and the General Meeting does not resolve to dismiss him within three months from the date of such suspension, the suspension shall lapse.

MANAGEMENT BOARD - DUTIES AND ORGANISATION

Article 17

- 17.1** The Management Board is charged with the management of the Company, subject to the restrictions contained in these articles of association. In performing their duties, Managing Directors shall be guided by the interests of the Company and of the business connected with it.
- 17.2** The Management Board shall draw up Management Board Rules concerning its organisation, decision-making and other internal matters, with due observance of these articles of association. In performing their duties, the Managing Directors shall act in compliance with the Management Board Rules.
- 17.3** The Management Board may perform the legal acts referred to in Section 2:94(1) DCC without the prior approval of the General Meeting.
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MANAGEMENT BOARD - DECISION-MAKING

Article 18

- 18.1** Without prejudice to Article 18.5, each Managing Director may cast one vote in the decision-making of the Management Board.
- 18.2** A Managing Director can be represented by another Managing Director holding a written proxy for the purpose of the deliberations and the decision-making of the Management Board.
- 18.3** Resolutions of the Management Board shall be passed, irrespective of whether this occurs at a meeting or otherwise, by Simple Majority unless the Management Board Rules provide differently.
- 18.4** Invalid votes, blank votes and abstentions shall not be counted as votes cast. Managing Directors who casted an invalid or blank vote or who abstained from voting shall be taken into account when determining the number of Managing Directors who are present or represented at a meeting of the Management Board.
- 18.5** Where there is a tie in any vote of the Management Board, the CEO shall have a casting vote, provided that there are at least three Managing Directors in office. Otherwise, the relevant resolution shall not have been passed.
- 18.6** A Managing Director shall not participate in the deliberations and decision-making of the Management Board on a matter in relation to which he has a direct or indirect personal interest which conflicts with the interests of the Company and of the business connected with it. If, as a result thereof, no resolution can be passed by the Management Board, the resolution shall be passed by the Supervisory Board.
- 18.7** Meetings of the Management Board can be held through audio-communication facilities, unless a Managing Director objects thereto.
- 18.8** Resolutions of the Management Board may, instead of at a meeting, be passed in writing, provided that all Managing Directors are familiar with the resolution to be passed and none of them objects to this decision-making process. Articles 18.1 through 18.6 apply mutatis mutandis.
- 18.9** The approval of the Supervisory Board is required for resolutions of the Management Board concerning the following matters:
- a.** the making of a proposal to the General Meeting concerning:
 - i.** the issue of shares or the granting of rights to subscribe for shares;
 - ii.** the limitation or exclusion of pre-emption rights;
 - iii.** the designation or granting of an authorisation as referred to in Articles 6.1, 7.5 and 10.2, respectively;
 - iv.** the reduction of the Company's issued share capital;
 - v.** the making of a distribution from the Company's profits or reserves;
 - vi.** the determination that all or part of a distribution, instead of being made in cash, shall be made in the form of shares in the Company's capital or in the form of assets;
 - vii.** the amendment of these articles of association;
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- viii. the entering into of a merger or demerger;
 - ix. the instruction of the Management Board to apply for the Company's bankruptcy; and
 - x. the Company's dissolution;
- b. the issue of shares or the granting of rights to subscribe for shares (except in connection with the ordinary operation of the Company's equity incentive plans);
 - c. the limitation or exclusion of pre-emption rights (except in connection with the ordinary operation of the Company's equity incentive plans);
 - d. calling for a payment as referred to in Article 8.1;
 - e. the establishment of new activities of the Company or its direct or indirect Subsidiaries in the areas of research, development, production and administration and/or the approval to establish activities of CureVac AG or its Subsidiaries in these areas, in each case in a state outside the European Union;
 - f. the acquisition of shares by the Company in its own capital (except in connection with the ordinary operation of the Company's equity incentive plans), including the determination of the value of a non-cash consideration for such an acquisition as referred to in Article 10.4;
 - g. the granting of an approval for the creation of a pledge as referred to in Article 13.1;
 - h. the granting of an approval for a transfer as referred to in Article 14.1;
 - i. the temporary replacement of a Managing Director who is absent or incapacitated as referred to in Article 15.4;
 - j. the drawing up or amendment of the Management Board Rules;
 - k. the performance of the legal acts described in Article 17.3 and 18.10;
 - l. the charging of amounts to be paid up on shares against the Company's reserves as described in Article 36.4;
 - m. the making of an interim distribution;
 - n. designating a current or former officer or employee of the Company or its Group Companies, who is not a current or former Managing Director or Supervisory Director, as an Indemnified Officer;
 - o. the stipulation of additional terms, conditions and restrictions in relation to the indemnification referred to in Article 26.1; and
 - p. such other resolutions of the Management Board as the Supervisory Board shall have specified in a resolution to that effect and notified to the Management Board.

18.10 The approval of the General Meeting is required for resolutions of the Management Board concerning a material change to the identity or the character of the Company or the business, including in any event:

- a. transferring the business or materially all of the business to a third party;
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- b. entering into or terminating a long-lasting alliance of the Company or of a Subsidiary of the Company either with another entity or company, or as a fully liable partner of a limited partnership or general partnership, if this alliance or termination is of significant importance for the Company; and
- c. acquiring or disposing of an interest in the capital of a company by the Company or by a Subsidiary of the Company with a value of at least one third of the value of the assets, according to the balance sheet with explanatory notes or, if the Company prepares a consolidated balance sheet, according to the consolidated balance sheet with explanatory notes in the Company's most recently adopted annual accounts.

18.11 In addition, during the Initial Approval Period, the approval of the General Meeting and the Supervisory Board is required for resolutions of the Management Board concerning:

- a. the transfer of the tax domicile of the Company and/or the approval of the transfer of the corporate or administrative seat of CureVac AG;
- b. the relocation of activities of the Company or its direct or indirect Subsidiaries in the areas of research, development, production and administration and/or the approval to relocate activities of CureVac AG or its Subsidiaries in these areas, including the relocation of such activities to Subsidiaries of the Company and CureVac AG, in each case in or to a state outside the European Union and in each case except to the extent that the Supervisory Board considers such activities – in particular in the area of the development of vaccines – not to be material for the protection of the health of the population of the European Union;
- c. the cessation of activities (including by way of disposal, demerger or similar transactions) of the Company, CureVac AG and/or their respective Subsidiaries in the areas of research, development, production and administration, in each case except to the extent that the Supervisory Board considers such activities – in particular in the area of the development of vaccines – not to be material for the protection of the health of the population of the European Union;
- d. the entering into by the Company or any of its Subsidiaries of mergers, demergers and similar reorganisations and the entering into by the Company or any of its Subsidiaries of acquisitions of businesses or participations, in each case except to the extent that the Supervisory Board considers such transactions not to be material;
- e. any amendment to the articles of association of CureVac AG which would result in one or more of the matters listed in this Article 18.11 no longer requiring a resolution of the Management Board subject to the approval of the General Meeting and the Supervisory Board; and
- f. the exercise of voting rights on shares or other voting interests held by the Company, directly or indirectly, in CureVac AG approving, directing or causing any one or more of the matters listed in this Article 18.11.

18.12 The absence of the approval of the Supervisory Board or the General Meeting of a resolution as referred to in Articles 18.9 through 18.11, respectively, shall result in the relevant resolution being null and void pursuant to Section 2:14(1) DCC but shall not affect the powers of representation of the Management Board or of the Managing Directors.

MANAGEMENT BOARD - COMPENSATION

Article 19

- 19.1** The General Meeting shall determine the Company's policy concerning the compensation of the Management Board with due observance of the relevant statutory requirements.
- 19.2** The compensation of Managing Directors shall be determined by the Supervisory Board with due observance of the policy referred to in Article 19.1.
- 19.3** The Supervisory Board shall submit proposals concerning compensation arrangements for the Management Board in the form of shares or rights to subscribe for shares to the General Meeting for approval. This proposal must at least include the number of shares or rights to subscribe for shares that may be awarded to the Management Board and which criteria apply for such awards or changes thereto. The absence of the approval of the General Meeting shall not affect the powers of representation of the Management Board or of the Managing Directors.

MANAGEMENT BOARD - REPRESENTATION

Article 20

- 20.1** The Management Board is entitled to represent the Company.
- 20.2** The power to represent the Company also vests in the CEO individually, as well as in any other two Managing Directors acting jointly.
- 20.3** The Company may also be represented by the holder of a power of attorney to that effect. If the Company grants a power of attorney to an individual, the Management Board may grant an appropriate title to such person.

SUPERVISORY BOARD - COMPOSITION

Article 21

- 21.1** The Company has a Supervisory Board consisting of three or more Supervisory Directors provided that, during either Initial Nomination Period, the Supervisory Board shall consist of up to eight (8) Supervisory Directors. The Supervisory Board shall be composed of individuals.
- 21.2** Subject to the first sentence of Article 21.1, the Supervisory Board shall determine the number of Supervisory Directors, which shall be no less than the number of Supervisory Directors as are necessary in order to allow dievini and KfW to exercise their respective nomination rights under Articles 22.2 and 22.3 during their respective Initial Nomination Period.
- 21.3** The Supervisory Board shall elect a Supervisory Director to be the Chairman and another Supervisory Director to be the Vice-Chairman. The Supervisory Board may dismiss the Chairman and/or the Vice-Chairman, provided that the Supervisory Director so dismissed shall subsequently continue his term of office as a Supervisory Director without having the title of Chairman or Vice-Chairman, as applicable.
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21.4 Where a Supervisory Director is no longer in office or is unable to act, he may be replaced temporarily by a person whom the Supervisory Board has designated for that purpose and, until then, the other Supervisory Director(s) shall be charged with the supervision of the Company. Where a Supervisory Director who has been appointed upon a nomination by dievini or KfW pursuant to Articles 22.2 and 22.3 is no longer in office or is unable to act, he may only be temporarily replaced by a person designated for such purposes by dievini or KfW, as applicable. The replacement becomes effective and the Supervisory Director so designated shall immediately have all rights, responsibilities, tasks and duties of a Supervisory Director (including any voting rights and specific rights awarded to the Supervisory Director he is replacing at the Supervisory Board) and (in relation to dievini to the fullest extent permitted by applicable law and at all times subject to KfW's right to designate a Supervisory Director in accordance with this Article 21.4) shall become a full member of the Supervisory Board with the rights of a KfW Nominee or dievini Nominee, as the case may be, as soon as a written designation to that effect has been received by the Chairman or the Vice-Chairman. Article 22.10 shall apply. Where all Supervisory Directors are no longer in office or are unable to act, the supervision of the Company shall be attributed to:

- a. the former Supervisory Director who most recently ceased to hold office as the Chairman, provided that he is willing and able to accept that position;
- b. during the Initial Nomination Period for dievini, a person designated for such purpose by dievini, unless the former Supervisory Director referred to in this Article 21.4 under a. above was appointed upon a nomination by dievini pursuant to Articles 22.2 and 22.3 and he is willing and able to accept the position; and
- c. during the Initial Nomination Period for KfW, a person designated for such purpose by KfW, unless the former Supervisory Director referred to in this Article 21.4 under a. above was appointed upon a nomination by KfW pursuant to Articles 22.2 and 22.3 and he is willing and able to accept the position,

which persons jointly may designate one or more other persons to be charged with the supervision of the Company (instead of, or together with, the former Supervisory Director and/or persons designated by dievini and KfW in accordance with this full sentence). The persons charged with the supervision of the Company pursuant to the previous sentence shall cease to hold that position when the General Meeting has appointed one or more persons as Supervisory Director(s) with due observance of Articles 22.2 and 22.3. Article 15.5 applies *mutatis mutandis*.

SUPERVISORY BOARD - APPOINTMENT, SUSPENSION AND DISMISSAL

Article 22

22.1 The General Meeting shall appoint the Supervisory Directors and may at any time suspend or dismiss any Supervisory Director in accordance with this Article 22.

22.2 The General Meeting can only appoint a Supervisory Director upon a nomination by:

- a. the Supervisory Board;
 - b. dievini in accordance with Article 22.3 paragraph a., during the Initial Nomination Period for dievini;
 - c. KfW in accordance with Article 22.3 paragraph b. during the Initial Nomination Period for KfW; or
 - d. any Nomination Concert in accordance with Article 22.4.
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As soon as reasonably practicable upon such nomination being made, the Supervisory Board shall convene a General Meeting for purposes of appointing such nominee to the Supervisory Board. The General Meeting may at any time resolve to render such nomination to be non-binding by a Simple Majority representing at least one third of the issued share capital. If a nomination is rendered non-binding, a new nomination shall be made by the Supervisory Board, the relevant Nomination Concert or, during the respective Initial Nomination Periods, dievini or KfW, as applicable. A second meeting as referred to in Section 2:120(3) DCC cannot be convened.

22.3 During the respective Initial Nomination Periods for dievini (as regards paragraph a. below) or KfW (as regards paragraph b. below):

- a.** dievini may nominate the following number of Supervisory Directors pursuant to Article 22.2:
 - i.** if dievini and its Affiliates and Ultimate Beneficiaries (individually or collectively) hold shares representing at least seventy percent (70%) of the Company's issued share capital: four (4) Supervisory Directors;
 - ii.** if dievini and its Affiliates and Ultimate Beneficiaries (individually or collectively) hold shares representing at least fifty percent (50%), but less than seventy percent (70%), of the Company's issued share capital: three (3) Supervisory Directors;
 - iii.** if dievini and its Affiliates and Ultimate Beneficiaries (individually or collectively) hold shares representing at least thirty percent (30%), but less than fifty percent (50%), of the Company's issued share capital: two (2) Supervisory Directors;
 - iv.** if dievini and its Affiliates and Ultimate Beneficiaries (individually or collectively) hold shares representing at least ten percent (10%), but less than thirty percent (30%), of the Company's issued share capital: one (1) Supervisory Director; and
- b.** KfW may nominate one (1) Supervisory Director pursuant to Article 22.2.

In the event where a Supervisory Director has been designated by dievini as temporary replacement in accordance with Article 21.4, such Supervisory Director shall be automatically dismissed from the moment where a dievini Nominee is appointed pursuant to Articles 22.2 and 22.3. The previous sentence applies mutatis mutandis with respect to KfW.

22.4 Any Nomination Concert may nominate one (1) Supervisory Director for each twenty percent (20%) of the issued share capital represented by that Nomination Concert pursuant to Article 22.2. Such nominee must be independent from the Nomination Concert and the Company under the standards applicable to the Company under the Dutch Corporate Governance Code and United States securities laws and stock exchange rules.

- 22.5** The Company may from time to time request supporting information and/or documents demonstrating the shareholding of dievini, together with its Affiliates and Ultimate Beneficiaries, KfW and any Nomination Concert for purposes of determining to which extent they have nomination rights pursuant to Articles 22.2 through 22.4. Upon the Company having made such a request, dievini, KfW or the relevant Nomination Concert, as applicable, shall promptly comply with such request to the extent permitted by applicable law.
- 22.6** If a Supervisory Director who was nominated by dievini, KfW or a Nomination Concert pursuant to Articles 22.2 through 22.4, as applicable, ceases to be a Supervisory Director before the expiry of his or her term of appointment, dievini, KfW or the relevant Nomination Concert, as applicable, shall as soon as reasonable possible nominate a successor (if, at that time, dievini, KfW or the Nomination Concert, as applicable, still has nomination rights under Articles 22.2 through 22.4, as applicable, at that time) and the Supervisory Board shall subsequently and promptly convene a General Meeting for purposes of appointing such nominee to the Supervisory Board.
- 22.7** Upon the making of a nomination for the appointment of a Supervisory Director, the following information shall be provided with respect to the candidate:
- a.** his age and profession;
 - b.** the aggregate nominal value of the shares held by him in the Company's capital;
 - c.** his present and past positions, to the extent that these are relevant for the performance of the tasks of a Supervisory Director;
 - d.** the names of any entities of which he is already a supervisory director or a non-executive director; if these include entities that form part of the same group, a specification of the group's name shall suffice; and
 - e.** if it concerns the nomination of a Supervisory Director pursuant to Article 22.4, all relevant information to establish that such nominee is independent as described in Article 22.4.

The nomination must be supported by reasons. In the case of a reappointment, the manner in which the candidate has fulfilled his duties as a Supervisory Director shall be taken into account.

- 22.8** At a General Meeting, a resolution to appoint a Supervisory Director can only be passed in respect of candidates whose names are stated for that purpose in the agenda of that General Meeting or the explanatory notes thereto.
- 22.9** If and when dievini, KfW or a Nomination Concert nominates an individual in accordance with Article 22.3 or Article 22.4, the Company and/or the Supervisory Board shall, upon request of the relevant nominator, procure that the Supervisory Board invites such nominee for its meetings and any of its committee meetings, where applicable, as an observer without voting rights until such individual has been appointed as member of the Supervisory Board, provided that such individual agrees with the Company to be bound by customary confidentiality with respect to any information received by that individual as an observer.
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- 22.10** If, for whatever reason, there is no dievini Nominee or no KfW Nominee in office during the Initial Nomination Period for dievini or KfW, as relevant, and a decision needs to be taken with respect to any matter referred to in Articles 6.12 and 6.13 of the Supervisory Board Rules, then the Supervisory Board shall not take any such decision until the replacement Supervisory Director of dievini or KfW, respectively, has validly become a full member of the Supervisory Board following his designation, unless dievini or KfW, as the case may be, has failed to notify the designation to the Chairman within four weeks after Chairman has notified dievini or KfW, as the case may be, in writing of the absence of the nominee. dievini or KfW, as the case may, shall notify the designation of the replacement Supervisory Director of dievini or KfW, respectively, to the Chairman as soon as reasonably and practicably possible but in any event within the four-week period as referred to in the previous sentence.

This Article 22.10 can only be amended by the General Meeting with the affirmative vote of (i) during the Initial Nomination Period for dievini, dievini and (ii) during the Initial Nomination Period for KfW, KfW, and Articles 6.12, 6.13 and 6.19 of the Supervisory Board Rules can only be amended by the Supervisory Board with the affirmative vote of (i) during the Initial Nomination Period for dievini, at least one dievini Nominee and (ii) during the Initial Nomination Period for KfW, the KfW Nominee.

- 22.11** A resolution of the General Meeting to suspend or dismiss a Supervisory Director shall require a majority of at least two thirds of the votes cast representing more than half of the issued share capital, unless the resolution is passed (i) at the proposal of the Supervisory Board, (ii) during the Initial Nomination Period for dievini, at the proposal of dievini (in respect of a dievini Nominee) or (iii) during the Initial Nomination Period for KfW, at the proposal of KfW (in respect of the KfW Nominee). A second meeting as referred to in Section 2:120(3) DCC cannot be convened.

- 22.12** If a Supervisory Director is suspended and the General Meeting does not resolve to dismiss him within three months from the date of such suspension, the suspension shall lapse.

SUPERVISORY BOARD - DUTIES AND ORGANISATION

Article 23

- 23.1** The Supervisory Board is charged with the supervision of the policy of the Management Board and the general course of affairs of the Company and of the business connected with it. The Supervisory Board shall provide the Management Board with advice. In performing their duties, Supervisory Directors shall be guided by the interests of the Company and of the business connected with it.
- 23.2** The Management Board shall provide the Supervisory Board with the information necessary for the performance of its tasks in a timely fashion. At least once a year, the Management Board shall inform the Supervisory Board in writing of the main features of the strategic policy, the general and financial risks and the administration and control system of the Company.
- 23.3** The Supervisory Board shall draw up Supervisory Board Rules concerning its organisation, decision-making and other internal matters, with due observance of these articles of association. In performing their duties, the Supervisory Directors shall act in compliance with the Supervisory Board Rules.
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- 23.4 The Supervisory Board shall establish the committees which the Company is required to have and otherwise such committees as are deemed to be appropriate by the Supervisory Board. The Supervisory Board shall draw up (and/or include in the Supervisory Board Rules) rules concerning the organisation, decision-making and other internal matters of its committees.

SUPERVISORY BOARD - DECISION-MAKING

Article 24

- 24.1 Without prejudice to Article 24.5, each Supervisory Director may cast one vote in the decision-making of the Supervisory Board.
- 24.2 A Supervisory Director can be represented by another Supervisory Director holding a written proxy for the purpose of the deliberations and the decision-making of the Supervisory Board.
- 24.3 Resolutions of the Supervisory Board shall be passed, irrespective of whether this occurs at a meeting or otherwise, by Simple Majority unless the Supervisory Board Rules provide differently.
- 24.4 Invalid votes, blank votes and abstentions shall not be counted as votes cast. Supervisory Directors who casted an invalid or blank vote or who abstained from voting shall be taken into account when determining the number of Supervisory Directors who are present or represented at a meeting of the Supervisory Board.
- 24.5 Where there is a tie in any vote of the Supervisory Board, the Chairman shall have a casting vote, provided that there are at least three Supervisory Directors in office. Otherwise, the relevant resolution shall not have been passed.
- 24.6 A Supervisory Director shall not participate in the deliberations and decision-making of the Supervisory Board on a matter in relation to which he has a direct or indirect personal interest which conflicts with the interests of the Company and of the business connected with it. If, as a result thereof, no resolution can be passed by the Supervisory Board, the resolution may nevertheless be passed by the Supervisory Board as if none of the Supervisory Directors has a conflict of interests as described in the previous sentence.
- 24.7 Meetings of the Supervisory Board can be held through audio-communication facilities, unless a Supervisory Director objects thereto.
- 24.8 Resolutions of the Supervisory Board may, instead of at a meeting, be passed in writing, provided that all Supervisory Directors are familiar with the resolution to be passed and none of them objects to this decision-making process. Articles 24.1 through 24.6 apply mutatis mutandis.
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SUPERVISORY BOARD - COMPENSATION

Article 25

The General Meeting may grant a compensation to the Supervisory Directors.

INDEMNITY

Article 26

26.1 The Company shall indemnify and hold harmless each of its Indemnified Officers against:

- a.** any financial losses or damages incurred by such Indemnified Officer; and
- b.** any expense reasonably paid or incurred by such Indemnified Officer in connection with any threatened, pending or completed suit, claim, action or legal proceedings of a civil, criminal, administrative or other nature, formal or informal, in which he becomes involved,

to the extent this relates to his current or former position with the Company and/or a Group Company and in each case to the extent permitted by applicable law.

26.2 No indemnification shall be given to an Indemnified Officer:

- a.** if a competent court or arbitral tribunal has established, without having (or no longer having) the possibility for appeal, that the acts or omissions of such Indemnified Officer that led to the financial losses, damages, expenses, suit, claim, action or legal proceedings as described in Article 26.1 are of an unlawful nature (including acts or omissions which are considered to constitute malice, gross negligence, intentional recklessness and/or serious culpability attributable to such Indemnified Officer);
- b.** to the extent that his financial losses, damages and expenses are covered under insurance and the relevant insurer has settled, or has provided reimbursement for, these financial losses, damages and expenses (or has irrevocably undertaken to do so);
- c.** in relation to proceedings brought by such Indemnified Officer against the Company, except for proceedings brought to enforce indemnification to which he is entitled pursuant to these articles of association, pursuant to an agreement between such Indemnified Officer and the Company which has been approved by the Management Board or pursuant to insurance taken out by the Company for the benefit of such Indemnified Officer; or
- d.** for any financial losses, damages or expenses incurred in connection with a settlement of any proceedings effected without the Company's prior consent.

26.3 The Management Board may stipulate additional terms, conditions and restrictions in relation to the indemnification referred to in Article 26.1.

GENERAL MEETING - CONVENING AND HOLDING MEETINGS

Article 27

27.1 Annually, at least one General Meeting shall be held. This annual General Meeting shall be held within six months after the end of the Company's financial year.

- 27.2** A General Meeting shall also be held:
- a.** within three months after the Management Board has considered it to be likely that the Company's equity has decreased to an amount equal to or lower than half of its paid up and called up capital, in order to discuss the measures to be taken if so required; and
 - b.** whenever the Management Board or the Supervisory Board so decides.
- 27.3** General Meetings must be held in the place where the Company has its corporate seat or in Arnhem, Assen, The Hague, Haarlem, 's-Hertogenbosch, Groningen, Leeuwarden, Lelystad, Maastricht, Middelburg, Rotterdam, Schiphol (Haarlemmermeer), Utrecht or Zwolle.
- 27.4** If the Management Board and the Supervisory Board have failed to ensure that a General Meeting as referred to in Articles 27.1 or 27.2 paragraph a. is held, each Person with Meeting Rights may be authorised by the court in preliminary relief proceedings to do so.
- 27.5** One or more Persons with Meeting Rights who collectively represent at least the part of the Company's issued share capital prescribed by law for this purpose may request the Management Board and the Supervisory Board in writing to convene a General Meeting, setting out in detail the matters to be discussed. If neither the Management Board nor the Supervisory Board (each in that case being equally authorised for this purpose) has taken the steps necessary to ensure that the General Meeting could be held within the relevant statutory period after the request, the requesting Person(s) with Meeting Rights may be authorised, at his/their request, by the court in preliminary relief proceedings to convene a General Meeting.
- 27.6** Any matter of which the discussion has been requested in writing by one or more Persons with Meeting Rights who, individually or collectively, represent at least the part of the Company's issued share capital prescribed by law for this purpose shall be included in the convening notice or announced in the same manner, if the Company has received the substantiated request or a proposal for a resolution no later than on the sixtieth day prior to that of the General Meeting.
- 27.7** Persons with Meeting Rights who wish to exercise their rights as described in Articles 27.5 and 27.6 must first consult the Management Board. If the intended exercise of such rights might result in a change to the Company's strategy, including by dismissing one or more Managing Directors or Supervisory Directors, the Management Board must be given the opportunity to invoke a reasonable period to respond to such intention with due observance of the applicable provisions of Dutch law and the Dutch Corporate Governance Code. The Person(s) with Meeting Rights concerned must respect any such response period stipulated by the Management Board. This Article 27.7 does not prejudice any rights which the Company or the Management Board and the Supervisory Board may have under Dutch law with regard to invoking a similar period or deliberation time.
- 27.8** A General Meeting must be convened with due observance of the relevant statutory minimum convening period.
- 27.9** All Persons with Meeting Rights must be convened for the General Meeting in accordance with applicable law. The shareholders may be convened for the General Meeting by means of convening letters sent to the addresses of those shareholders in accordance with Article 5.5. The previous sentence does not prejudice the possibility of sending a convening notice by electronic means in accordance with Section 2:113(4) DCC.
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GENERAL MEETING - PROCEDURAL RULES

Article 28

- 28.1** The General Meeting shall be chaired by one of the following individuals, taking into account the following order of priority:
- a.** by the Chairman, if there is a Chairman and he is present at the General Meeting;
 - b.** by the Vice-Chairman, if there is a Vice-Chairman and he is present at the General Meeting;
 - c.** by another Supervisory Director who is chosen by the Supervisory Directors present at the General Meeting from their midst;
 - d.** by the CEO, if there is a CEO and he is present at the General Meeting;
 - e.** by another Managing Director who is chosen by the Managing Directors present at the General Meeting from their midst; or
 - f.** by another person appointed by the General Meeting.

The person who should chair the General Meeting pursuant to paragraphs a. through f. may appoint another person to chair the General Meeting instead of him.

- 28.2** The chairman of the General Meeting shall appoint another person present at the General Meeting to act as secretary and to minute the proceedings at the General Meeting. The minutes of a General Meeting shall be adopted by the chairman of that General Meeting or by the Management Board. Where an official report of the proceedings is drawn up by a civil law notary, no minutes need to be prepared. Every Managing Director and Supervisory Director may instruct a civil law notary to draw up such an official report at the Company's expense.
- 28.3** The chairman of the General Meeting shall decide on the admittance to the General Meeting of persons other than:
- a.** the persons who have Meeting Rights at that General Meeting, or their proxyholders; and
 - b.** those who have a statutory right to attend that General Meeting on other grounds.
- 28.4** The holder of a written proxy from a Person with Meeting Rights who is entitled to attend a General Meeting shall only be admitted to that General Meeting if the proxy is determined to be acceptable by the chairman of that General Meeting.
- 28.5** The Company may direct that any person, before being admitted to a General Meeting, identify himself by means of a valid passport or driver's license and/or should be submitted to such security arrangements as the Company may consider to be appropriate under the given circumstances. Persons who do not comply with these requirements may be refused entry to the General Meeting.
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- 28.6** The chairman of the General Meeting has the right to eject any person from the General Meeting if he considers that person to disrupt the orderly proceedings at the General Meeting.
- 28.7** The General Meeting may be conducted in a language other than the Dutch language, if so determined by the chairman of the General Meeting.
- 28.8** The chairman of the General Meeting may limit the amount of time that persons present at the General Meeting are allowed to take in addressing the General Meeting and the number of questions they are allowed to raise, with a view to safeguarding the orderly proceedings at the General Meeting. The chairman of the General Meeting may also adjourn the meeting if he considers that this shall safeguard the orderly proceedings at the General Meeting.

GENERAL MEETING - EXERCISE OF MEETING AND VOTING RIGHTS

Article 29

- 29.1** Each Person with Meeting Rights has the right to attend, address and, if applicable, vote at General Meetings, whether in person or represented by the holder of a written proxy. Holders of fractional shares together constituting the nominal value of a share of the relevant class shall exercise these rights collectively, whether through one of them or through the holder of a written proxy.
- 29.2** The Management Board may decide that each Person with Meeting Rights is entitled, whether in person or represented by the holder of a written proxy, to participate in, address and, if applicable, vote at the General Meeting by electronic means of communication. For the purpose of applying the preceding sentence it must be possible, by electronic means of communication, for the Person with Meeting Rights to be identified, to observe in real time the proceedings at the General Meeting and, if applicable, to vote. The Management Board may impose conditions on the use of the electronic means of communication, provided that these conditions are reasonable and necessary for the identification of the Person with Meeting Rights and the reliability and security of the communication. Such conditions must be announced in the convening notice.
- 29.3** The Management Board can also decide that votes cast through electronic means of communication or by means of a letter prior to the General Meeting are considered to be votes that are cast during the General Meeting. These votes shall not be cast prior to the Record Date.
- 29.4** For the purpose of Articles 29.1 through 29.3, those who have voting rights and/or Meeting Rights on the Record Date and are recorded as such in a register designated by the Management Board shall be considered to have those rights, irrespective of whoever is entitled to the shares or depository receipts at the time of the General Meeting. Unless Dutch law requires otherwise, the Management Board is free to determine, when convening a General Meeting, (i) whether the previous sentence applies and (ii) that the Record Date is applied with respect to shares of a specific class only.
- 29.5** Each Person with Meeting Rights must notify the Company in writing of his identity and his intention to attend the General Meeting. This notice must be received by the Company ultimately on the seventh day prior to the General Meeting, unless indicated otherwise when such General Meeting is convened. Persons with Meeting Rights that have not complied with this requirement may be refused entry to the General Meeting. When a General Meeting is convened the Management Board may stipulate not to apply the previous provisions of this Article 29.5 in respect of the exercise of Meeting Rights and/or voting rights attached to preferred shares at such General Meeting.
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GENERAL MEETING - DECISION-MAKING

Article 30

- 30.1** Each share, irrespective of which class it concerns, shall give the right to cast one vote at the General Meeting. Fractional shares of a certain class, if any, collectively constituting the nominal value of a share of that class shall be considered to be equivalent to such a share.
- 30.2** No vote can be cast at a General Meeting in respect of a share belonging to the Company or a Subsidiary of the Company or in respect of a share for which any of them holds the depository receipts. Usufructuaries and pledgees of shares belonging to the Company or its Subsidiaries are not, however, precluded from exercising their voting rights if the usufruct or pledge was created before the relevant share belonged to the Company or a Subsidiary of the Company. Neither the Company nor a Subsidiary of the Company can vote shares in respect of which it holds a usufruct or a pledge.
- 30.3** Unless a greater majority is required by law or by these articles of association, all resolutions of the General Meeting shall be passed by Simple Majority. If applicable law requires a greater majority for resolutions of the General Meeting and allows the articles of association to provide for a lower majority, those resolutions shall be passed with the lowest possible majority, except if these articles of association explicitly provide otherwise.
- 30.4** Invalid votes, blank votes and abstentions shall not be counted as votes cast. Shares in respect of which an invalid or blank vote has been cast and shares in respect of which an abstention has been made shall be taken into account when determining the part of the issued share capital that is represented at a General Meeting.
- 30.5** Where there is a tie in any vote of the General Meeting, the relevant resolution shall not have been passed.
- 30.6** The chairman of the General Meeting shall decide on the method of voting and the voting procedure at the General Meeting.
- 30.7** The determination during the General Meeting made by the chairman of that General Meeting with regard to the results of a vote shall be decisive. If the accuracy of the chairman's determination is contested immediately after it has been made, a new vote shall take place if the majority of the General Meeting so requires or, where the original vote did not take place by response to a roll call or in writing, if any party with voting rights who is present so requires. The legal consequences of the original vote shall lapse as a result of the new vote.
- 30.8** The Management Board shall keep a record of the resolutions passed. The record shall be available at the Company's office for inspection by Persons with Meeting Rights. Each of them shall, upon request, be provided with a copy of or extract from the record, at no more than the cost price.
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30.9 Shareholders may pass resolutions outside a meeting, unless the Company has cooperated with the issuance of depository receipts for shares in its capital. Such resolutions can only be passed by a unanimous vote of all shareholders with voting rights. The votes shall be cast in writing and may be cast through electronic means.

30.10 The Managing Directors and Supervisory Directors shall, in that capacity, have an advisory vote at the General Meetings.

GENERAL MEETING - SPECIAL RESOLUTIONS

Article 31

31.1 The following resolutions can only be passed by the General Meeting at the proposal of the Management Board:

- a.** the issue of shares or the granting of rights to subscribe for shares;
- b.** the limitation or exclusion of pre-emption rights;
- c.** the designation or granting of an authorisation as referred to in Articles 6.1, 7.5 and 10.2, respectively;
- d.** the reduction of the Company's issued share capital;
- e.** the making of a distribution on the ordinary shares from the Company's profits or reserves;
- f.** the making of a distribution in the form of shares in the Company's capital or in the form of assets, instead of in cash;
- g.** the amendment of these articles of association;
- h.** the entering into of a merger or demerger;
- i.** the instruction of the Management Board to apply for the Company's bankruptcy; and
- j.** the Company's dissolution.

31.2 A matter which has been included in the convening notice or announced in the same manner by or at the request of one or more Persons with Meeting Rights pursuant to Articles 27.5 and/or 27.6 shall not be considered to have been proposed by the Management Board for purposes of Article 31.1, unless the Management Board has expressly indicated that it supports the discussion of such matter in the agenda of the General Meeting concerned or in the explanatory notes thereto.

CLASS MEETINGS

Article 32

32.1 A Class Meeting shall be held whenever a resolution of that Class Meeting is required by Dutch law or under these articles of association and otherwise whenever the Management Board or the Supervisory Board so decides.

- 32.2** Without prejudice to Article 32.1, for Class Meetings of ordinary shares, the provisions concerning the convening of, drawing up of the agenda for, holding of and decision-making by the General Meeting apply mutatis mutandis.
- 32.3** For Class Meetings of preferred shares, the following shall apply:
- a.** Articles 27.3, 27.9, 28.3, 30.1, 30.2 through 30.10 apply mutatis mutandis;
 - b.** a Class Meeting must be convened no later than on the eighth day prior to that of the meeting;
 - c.** a Class Meeting shall appoint its own chairman; and
 - d.** where the rules laid down by these articles of association in relation to the convening, location of or drawing up of the agenda for a Class Meeting have not been complied with, legally valid resolutions may still be passed by that Class Meeting by a unanimous vote at a meeting at which all shares of the relevant class are represented.

REPORTING - FINANCIAL YEAR, ANNUAL ACCOUNTS AND MANAGEMENT REPORT

Article 33

- 33.1** The Company's financial year shall coincide with the calendar year.
- 33.2** Annually, within the relevant statutory period, the Management Board shall prepare the annual accounts and the management report and deposit them at the Company's office for inspection by the shareholders.
- 33.3** The annual accounts shall be signed by the Managing Directors and the Supervisory Directors. If any of their signatures is missing, this shall be mentioned, stating the reasons.
- 33.4** The Company shall ensure that the annual accounts, the management report and the particulars to be added pursuant to Section 2:392(1) DCC shall be available at its offices as from the convening of the General Meeting at which they are to be discussed. The Persons with Meeting Rights are entitled to inspect such documents at that location and to obtain a copy at no cost.
- 33.5** The annual accounts shall be adopted by the General Meeting.

REPORTING - AUDIT

Article 34

- 34.1** The General Meeting shall instruct an external auditor as referred to in Section 2:393 DCC to audit the annual accounts. Where the General Meeting fails to do so, the Supervisory Board shall be authorised to do so.
- 34.2** The instruction may be revoked by the General Meeting and by the body that has granted the instruction. The instruction can only be revoked for well-founded reasons; a difference of opinion regarding the reporting or auditing methods shall not constitute such a reason.
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DISTRIBUTIONS - GENERAL

Article 35

- 35.1** A distribution can only be made to the extent that the Company's equity exceeds the amount of the paid up and called up part of its capital plus the reserves which must be maintained by law.
- 35.2** The Management Board may resolve to make interim distributions, provided that it appears from interim accounts to be prepared in accordance with Section 2:105(4) DCC that the requirement referred to in Article 35.1 has been met and, if it concerns an interim distribution of profits, taking into account the order of priority described in Article 37.1.
- 35.3** No entitlement to distributions is attached to preferred shares, other than as described in Articles 11.2, 37.1 and 38.3.
- 35.4** Distributions shall be made in proportion to the aggregate nominal value of the shares . In deviation of the previous sentence, distributions on preferred shares (or to the former holders of preferred shares) shall be made in proportion to the amounts paid up (or formerly paid up) on those preferred shares.
- 35.5** The parties entitled to a distribution shall be the relevant shareholders, usufructuaries and pledgees, as the case may be, at a date to be determined by the Management Board for that purpose. This date shall not be earlier than the date on which the distribution was announced.
- 35.6** The General Meeting may resolve, subject to Article 31, that all or part of a distribution, instead of being made in cash, shall be made in the form of shares in the Company's capital or in the form of the Company's assets.
- 35.7** A distribution shall be payable on such date and, if it concerns a distribution in cash, in such currency or currencies as determined by the Management Board. If it concerns a distribution in the form of the Company's assets, the Management Board shall determine the value attributed to such distribution for purposes of recording the distribution in the Company's accounts with due observance of applicable law (including the applicable accounting principles).
- 35.8** A claim for payment of a distribution shall lapse after five years have expired after the distribution became payable.
- 35.9** For the purpose of calculating the amount or allocation of any distribution, shares held by the Company in its own capital shall not be taken into account. No distribution shall be made to the Company in respect of shares held by it in its own capital.

DISTRIBUTIONS - RESERVES

Article 36

- 36.1** All reserves maintained by the Company shall be attached exclusively to the ordinary shares.
- 36.2** Subject to Article 31, the General Meeting is authorised to resolve to make a distribution from the Company's reserves.
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36.3 Without prejudice to Articles 36.4 and 37.2, distributions from a reserve shall be made exclusively on the ordinary shares.

36.4 The Management Board may resolve to charge amounts to be paid up on shares against the Company's reserves, irrespective of whether those shares are issued to existing shareholders.

DISTRIBUTIONS - PROFITS

Article 37

37.1 Subject to Article 35.1, the profits shown in the Company's annual accounts in respect of a financial year shall be appropriated as follows, and in the following order of priority:

- a.** to the extent that any preferred shares have been cancelled without the distribution described in Article 11.2 paragraph b. having been paid in full and without any such deficit subsequently having been paid in full as described in this Article 37.1 or Article 37.2, an amount equal to any such (remaining) deficit shall be distributed to those who held those preferred shares at the moment of such cancellation becoming effective;
- b.** to the extent that any Preferred Distribution (or part thereof) in relation to previous financial years has not yet been paid in full as described in this Article 37.1 or Article 37.2, an amount equal to any such (remaining) deficit shall be distributed on the preferred shares;
- c.** the Preferred Distribution shall be distributed on the preferred shares in respect of the financial year to which the annual accounts pertain;
- d.** the Management Board shall determine which part of the remaining profits shall be added to the Company's reserves; and
- e.** subject Article 31, the remaining profits shall be at the disposal of the General Meeting for distribution on the ordinary shares.

37.2 To the extent that the distributions described in Article 37.1 paragraphs a. through c. (or any part thereof) cannot be paid out of the profits shown in the annual accounts, any such deficit shall be distributed from the Company's reserves, subject to Articles 35.1 and 35.2.

37.3 Subject to Article 35.1, a distribution of profits shall be made after the adoption of the annual accounts that show that such distribution is allowed.

DISSOLUTION AND LIQUIDATION

Article 38

38.1 In the event of the Company being dissolved, the liquidation shall be effected by the Management Board under the supervision of the Supervisory Board, unless the General Meeting decides otherwise.

38.2 To the extent possible, these articles of association shall remain in effect during the liquidation.

- 38.3** To the extent that any assets remain after payment of all of the Company's debts, those assets shall be distributed as follows, and in the following order of priority:
- a.** the amounts paid up on the preferred shares shall be repaid on such preferred shares;
 - b.** to the extent that any preferred shares have been cancelled without the distribution described in Article 11.2 paragraph b. having been paid in full and without any such deficit subsequently having been paid in full as described in Articles 37.1 and 37.2, an amount equal to any such (remaining) deficit shall be distributed to those who held those preferred shares at the moment of such cancellation becoming effective;
 - c.** to the extent that any Preferred Distribution (or part thereof) in relation to financial years prior to the financial year in which the distribution referred to in paragraph a. occurs has not yet been paid in full as described in Articles 37.1 and 37.2, an amount equal to any such (remaining) deficit shall be distributed on the preferred shares;
 - d.** the Preferred Distribution shall be paid on the preferred shares calculated in respect of the part of the financial year in which the distribution referred to in paragraph a. is made, for the number of days that have already elapsed during such part of the financial year; and
 - e.** any remaining assets shall be distributed to the holders of ordinary shares.
- 38.4** After the Company has ceased to exist, its books, records and other information carriers shall be kept for the period prescribed by law by the person designated for that purpose in the resolution of the General Meeting to dissolve the Company. Where the General Meeting has not designated such a person, the liquidators shall do so.

TRANSITIONAL PROVISIONS

- Article 39**
- 39.1** Upon the Company's issued share capital increasing to an amount of at least **[amount]** euro (EUR **[amount]**):
- a.** the Company's authorised share capital described in Article 4.1 shall immediately and automatically increase to an amount of **[amount]** euro (EUR **[amount]**); and
 - b.** the composition of the authorised share capital described in Article 4.2 shall immediately and automatically be adjusted, such that the authorised share capital shall be divided into:
 - i.** **[number]** (**[number]**) ordinary shares; and
 - ii.** **[number]** (**[number]**) preferred shares,each having a nominal value of twelve eurocents (EUR 0.12).
- This Article 39.1 shall lapse and shall no longer form part of these articles of association at the moment immediately after the increase of the Company's issued share capital as described in the first sentence of this Article 39.1 shall have become effective.
- 39.2** The Company's first financial year ends on the thirty-first day of December two thousand and twenty.
- 39.3** This entire Article 39 shall lapse and shall no longer form part of these articles of association on the first day of the Company's second financial year.
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MANAGEMENT BOARD RULES

CUREVAC N.V.

INTRODUCTION

Article 1

1.1 These rules govern the organisation, decision-making and other internal matters of the Management Board. In performing their duties, the Managing Directors shall comply with these rules.

1.2 These rules shall be posted on the Website.

DEFINITIONS AND INTERPRETATION

Article 2

2.1 In these rules the following definitions shall apply:

Affiliate	An Affiliate (<i>Gelieerde Partij</i>) as defined in the Articles of Association.
Article	An article of these rules.
Articles of Association	The Company's articles of association.
Board Meeting	A meeting of the Management Board.
CEO	The Company's chief executive officer.
CFO	The Company's chief financial officer.
Company	CureVac N.V.
Conflict of Interests	A direct or indirect personal interest which conflicts with the interests of the Company and of the business connected with it.
Diversity Policy	The Company's diversity policy.
External Auditor	The external auditor or audit firm within the meaning of Section 2:393 of the Dutch Civil Code, engaged or to be engaged to examine the Company's annual accounts and management report, or the Company's independent outside audit firm for purposes of U.S. laws and regulation (including applicable NASDAQ and/or SEC requirements), as the context may require.
Family Member	A Managing Director's spouse, registered partner or other life companion, foster child or any relative or in-law up to the second degree.
General Meeting	The Company's general meeting.

Group	The Company and all its Subsidiaries.
Initial Approval Period	The Initial Approval Period (<i>Initiële Goedkeuringsperiode</i>) as defined in the Articles of Association.
Initial Nomination Period	The Initial Nomination Period (<i>Initiële Nominatieperiode</i>) as defined in the Articles of Association.
Initial Period	The Initial Period (<i>Initiële Periode</i>) as defined in the Articles of Association.
Management Board	The Company's management board.
Managing Director	A member of the Management Board.
NASDAQ	The NASDAQ Stock Market.
Protective Foundation	A foundation under Dutch law whose objective it would be to promote and protect the interests of the Company, the business connected with it and its stakeholders from time to time, and repressing possible influences which could threaten the strategy, continuity, independence and/or identity of the Company or the business connected with it to such an extent that this could be considered to be damaging to the aforementioned interests.
SEC	The U.S. Securities and Exchange Commission.
Simple Majority	More than half of the votes cast.
Subsidiary	A subsidiary within the meaning of Section 2:24a DCC.
Supervisory Board	The Company's supervisory board.
Website	The Company's website.

2.2 References to statutory provisions are to those provisions as they are in force from time to time.

2.3 Terms that are defined in the singular have a corresponding meaning in the plural.

2.4 Words denoting a gender include each other gender.

2.5 Except as otherwise required by law, the terms "written" and "in writing" include the use of electronic means of communication.

COMPOSITION

Article 3

3.1 The Management Board consists of one or more Managing Directors, provided that, during the Initial Period, the Management Board shall consist of up to seven Managing Directors.

3.2 The composition of the Management Board shall be determined taking into consideration the principles laid down in the Diversity Policy and in paragraph 1 of Annex B to these rules.

- 3.3 The Managing Directors shall be appointed, suspended and dismissed in accordance with the Articles of Association, these rules and applicable law.
- 3.4 A person may be appointed as Managing Director for a term of up to four years, without limitation on the number of consecutive terms which a Managing Director may serve.
- 3.5 The Supervisory Board shall elect a Managing Director to be the CEO. The Supervisory Board may dismiss the CEO, provided that the Managing Director so dismissed shall subsequently continue his term of office as a Managing Director without having the title of CEO.
- 3.6 The Management Board shall elect a Managing Director to be the CFO. The Management Board may dismiss the CFO, provided that the Managing Director so dismissed shall subsequently continue his term of office as a Managing Director without having the title of CFO.
- 3.7 A Managing Director shall retire in the event of inadequate performance, structural incompatibility of interests, and in other instances where early retirement of the Managing Director is considered necessary by the Supervisory Board.
- 3.8 The acceptance by a Managing Director of a position as supervisory director or non-executive director with another company or entity shall be subject to the approval of the Supervisory Board. A Managing Director shall notify the Supervisory Board in advance of any other position he wishes to pursue.

DUTIES AND ORGANISATION

Article 4

- 4.1 The Management Board is charged with the management of the Company, subject to the restrictions contained in the Articles of Association and these rules. In performing their duties, Managing Directors shall be guided by the interests of the Company and of the business connected with it. In doing so, the Management Board shall focus on long-term value creation for the Company and its business and take into account the relevant stakeholder interests.
- 4.2 The tasks and duties of the Management Board include the following matters:
- a. setting the Company's management agenda;
 - b. enhancing the Group's performance;
 - c. developing a general strategy and taking into account risks connected to the Group's business activities;
 - d. determining and pursuing operational and financial objectives;
 - e. structuring and managing internal business control systems;
 - f. overseeing the Group's financial reporting processes;
 - g. ensuring the Group's compliance with applicable laws and regulations;
 - h. ensuring compliance with and maintaining the Group's corporate governance structure;
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- i.** ensuring publication by the Company of any information required by applicable laws and regulations;
- j.** preparing the Company's annual report, the annual budget and significant capital expenditures; and
- k.** monitoring corporate social responsibility issues.

4.3 The Management Board shall provide the Supervisory Board with the information necessary for the performance of its tasks in a timely fashion. At least once a year, the Management Board shall inform the Supervisory Board in writing of the main features of the strategic policy, the general and financial risks and the administration and control system of the Company.

4.4 Without limiting the generality of Article 4.3, the Management Board shall furnish to the Supervisory Board:

- a.** immediately after receipt of the Company's audit report from the External Auditor with respect to the Company's annual financial statements as of the end of each financial year, those audited financial statements and the related audited statements of income, stockholders' equity and cash flows for the financial year then ended, prepared in accordance with the applicable accounting principles and certified by the External Auditor and the consolidated financial statements of the Company and its Subsidiaries to the extent legally required, together with the respective audit report(s);
 - b.** no later than thirty (30) days prior to the start of each financial year, an annual operating plan for the Company and its Subsidiaries in respect of such financial year that shall include:
 - i.** monthly projections of profit and loss including a cash flow forecast and a balance sheet projection for such financial year;
 - ii.** a business plan for the Company and its Subsidiaries relating to the succeeding financial year setting forth in reasonable detail a development plan, financial plan and investment plan, budgeted and projected figures and other information; and
 - iii.** forecasts for the next succeeding financial year;
 - c.** within thirty (30) days after each quarter in each financial year, unaudited quarterly financial statements of the Company and its Subsidiaries as of the end of such quarter and the related unaudited statements of income, stockholders' equity and cash flows for such quarter, prepared in accordance with the applicable accounting principles;
 - d.** promptly following the first six months of each financial year, an update to the annual operating plan including the matters set forth in paragraph b. above, showing the differences from the annual operating plan as initially approved and the actual results; and
 - e.** without unreasonable delay a prompt notice of:
 - i.** any material adverse event relating to the Company and its Subsidiaries; and
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- ii. any lawsuit, claim, proceeding or investigation pending or, to the knowledge of the Management Board, threatened, or any judgment, order or decree involving the Company or its Subsidiaries that would reasonably be expected to have a material adverse effect on the Company or any of its Subsidiaries.

- 4.5 The CFO shall regularly report to the CEO and discuss the performance of his tasks and duties with the CEO, in each case subject to supervision by the Supervisory Board.
- 4.6 All Managing Directors shall follow an induction programme geared to their role, covering general financial, social and legal affairs, financial reporting by the Company, specific aspects that are unique to the Company and its business, the Company's corporate culture, the Company's relationship with employees and the responsibilities of a Managing Director under applicable law.
- 4.7 The Management Board shall ensure that internal procedures are established and maintained which safeguard that relevant information is or becomes known to the Management Board and the Supervisory Board in a timely fashion.
- 4.8 The chairman of the Supervisory Board is the main contact of the Supervisory Board regarding the performance of the Managing Directors.
- 4.9 At least annually, the Management Board shall evaluate its own functioning and the functioning of the individual Managing Directors, shall discuss the conclusions of such evaluations, and shall identify aspects where the Managing Directors require further training or education. During such evaluation, Managing Directors should be able to express their views confidentially.
- 4.10 Each Managing Director must treat all information and documentation obtained in connection with his or her position as Managing Director with the utmost discretion, integrity and confidentiality.

DECISION-MAKING

Article 5

- 5.1 The Management Board shall meet as often as any Managing Director deems necessary or appropriate.
 - 5.2 At least twice per calendar year, as part of the Company's strategy, the Management Board shall discuss the Company's long-term strategy with the Supervisory Board. As part of those discussions, the Management Board and the Supervisory Board shall consider whether it would be in the best interests of the Company and its business to cause the incorporation of a Protective Foundation and to grant a customary right to subscribe for preferred shares in the Company's capital to such Protective Foundation (which right would in any event not be exercisable until after the expiration of the later of (i) the Initial Period or (ii) the Initial Approval Period).
 - 5.3 A Board Meeting may be convened by, or at the request of, any Managing Director by means of a written notice sent to all Managing Directors. Notice of a Board Meeting shall include the date, time, place and agenda for that Board Meeting. Board Meetings can be held through audio-communication facilities. Managing Directors attending the Board Meeting through audio-communication are considered present at the Board Meeting.
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- 5.4** All Managing Directors shall be given reasonable notice of at least five days for all Board Meetings, unless a shorter notice is required to avoid a delay which could reasonably be expected to have an adverse effect on the Company and/or the business connected with it.
- 5.5** If a Board Meeting has not been duly convened, resolutions may nevertheless be passed at that Board Meeting if all Managing Directors not present or represented at that Board Meeting have waived compliance with the convening formalities in writing.
- 5.6** The Managing Director convening a Board Meeting sets the agenda for that Board Meeting. Other Managing Directors may submit agenda items to the Managing Director convening the Board Meeting.
- 5.7** All Board Meetings shall be chaired by the CEO or, in his absence, by another Managing Director designated by the Managing Directors present at the relevant Board Meeting. The chairman of the Board Meeting shall appoint a secretary to prepare the minutes of the proceedings at such Board Meeting. The secretary does not necessarily need to be a Managing Director.
- 5.8** Minutes of the proceedings at a Board Meeting shall be sufficient evidence thereof and of the observance (or waiver) of all necessary formalities, provided that such minutes are certified by a Managing Director.
- 5.9** Resolutions of a Board Meeting can also be evidenced by a statement signed by the chairman and the secretary of that Board Meeting.
- 5.10** Without prejudice to Article 5.13, each Managing Director may cast one vote in the decision-making of the Management Board. Invalid votes, blank votes and abstentions shall not be counted as votes cast.
- 5.11** A Managing Director can be represented by another Managing Director holding a written proxy for the purpose of the deliberations and the decision-making of the Management Board.
- 5.12** Resolutions of the Management Board shall be passed, irrespective of whether this occurs at a Board Meeting or otherwise, by Simple Majority, unless these rules provide differently. The Management Board shall require the approval of the Supervisory Board for the matters listed in Annex A to these rules. The Management Board shall require the approval of the General Meeting for the matters set out in the Articles of Association, in particular in articles 18.10 and 18.11 of the Articles of Association.
- 5.13** Where there is a tie in any vote of the Management Board, the CEO shall have a casting vote, provided that there are at least three Managing Directors in office. Otherwise, the relevant resolution shall not have been passed.
- 5.14** Resolutions of the Management Board may, instead of at a Board Meeting, be passed in writing, provided that all Managing Directors are familiar with the resolution to be passed and none of them objects to this decision-making process. Articles 5.10 through 5.13 apply mutatis mutandis.
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- 5.15** The Management Board shall observe and abide by the rules described in Annex B to these rules in order to preserve the Company's tax residency in Germany.
- 5.16** The Management Board may require that officers and external advisers attend Board Meetings. In particular, the Management Board shall request the External Auditor to attend the Board Meeting where the External Auditor's audit report regarding the Company's financial statements is discussed.

CONFLICT OF INTERESTS

Article 6

- 6.1** A Managing Director shall promptly report any actual or potential Conflict of Interests in a transaction that is of material significance to the Company and/or such Managing Director to the chairman of the Supervisory Board and to the other Managing Directors, providing all relevant information relating to such transaction, including the involvement of any Family Member.
- 6.2** The determination whether a Managing Director has a Conflict of Interests shall primarily be the responsibility of that Managing Director. However, in case of debate, that determination shall be made by the Supervisory Board without the Managing Director concerned being present.
- 6.3** A Managing Director shall not participate in the deliberations and decision-making of the Management Board on a matter in relation to which he has a Conflict of Interests. If, as a result thereof, no resolution can be passed by the Management Board, the resolution shall be passed by the Supervisory Board.
- 6.4** Transactions in respect of which a Managing Director has a Conflict of Interests shall be agreed on arms' length terms. Any such transactions where the Conflict of Interests is of material significance to the Company and/or to the Managing Director concerned shall be subject to the approval of the Supervisory Board.
- 6.5** In order to avoid potential Conflicts of Interests, or the appearance thereof, Managing Directors shall not:
- a.** enter into competition with the Company;
 - b.** demand or accept substantial gifts from the Company for themselves or for their respective Family Members;
 - c.** provide unjustified advantages to third parties to the detriment of the Company;
 - d.** take advantage of business opportunities to which the Company would be entitled for themselves or for their respective Family Members.
- 6.6** The Company shall not grant its Managing Directors or their respective Family Members any personal loans, guarantees or similar financial arrangements.
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OWNERSHIP OF AND TRADING IN FINANCIAL INSTRUMENTS

Article 7

The Managing Directors shall be subject to the Company's insider trading policy. In addition, each Managing Director shall practice great reticence:

- a. when trading in shares or other financial instruments issued by another listed company, if this could reasonably create the appearance of such Managing Director violating applicable insider trading and/or market manipulation prohibitions; and
- b. when trading in shares or other financial instruments issued by another listed company which is a direct competitor of the Company.

AMENDMENTS AND DEVIATIONS

Article 8

Pursuant to a resolution to that effect, the Management Board may, with the approval of the Supervisory Board, amend or supplement these rules and allow temporary deviations from these rules, subject to ongoing compliance with NASDAQ requirements, SEC rules and applicable law generally.

GOVERNING LAW AND JURISDICTION

Article 9

These rules shall be governed by and shall be construed in accordance with the laws of the Netherlands. Any dispute arising in connection with these rules shall be submitted to the exclusive jurisdiction of the competent court in Amsterdam, the Netherlands.

Annex A – Matters Requiring Supervisory Board Approval

The Management Board will require the approval of the Supervisory Board for (i) the matters described in article 18.9 and, during the Initial Approval Period, article 18.11 of the Articles of Association and (ii) any of the following resolutions, to the extent these concern the Company or any of its Subsidiaries or participations (*deelnemingen*):

- a.** the matters which require the approval of the Supervisory Board as listed in these rules and/or in the Company's articles of association;
 - b.** entering into Related Person transactions (as defined in the Company's related person transaction policy, as approved by the Supervisory Board from time to time) and in any event including transactions representing a transaction value greater than EUR 100,000.00 (determined per transaction, with related transactions concluded within one year being considered to constitute the same transaction) (or such higher threshold as determined by the Supervisory Board and notified to the Management Board in writing) between the Company or a Subsidiary on the one hand and a shareholder of the Company or an Affiliate of a shareholder of the Company on the other hand;
 - c.** incurring debt in an amount greater than EUR 250,000.00 (determined per transaction, with related transactions concluded within one year being considered to constitute the same transaction) (or such higher threshold as determined by the Supervisory Board and notified to the Management Board in writing);
 - d.** declaring or proposing dividends and other distributions or entering into repurchase or redemption transactions of equity securities, other than, in the case of repurchase or redemption of equity securities, in connection with the ordinary operation of the Company's equity incentive plans;
 - e.** any acquisition, sale, divestiture or similar M&A transaction representing a transaction value greater than EUR 250,000.00 (determined per transaction, with related transactions concluded within one year being considered to constitute the same transaction) (or such higher threshold as determined by the Supervisory Board and notified to the Management Board in writing);
 - f.** entry into any material joint venture or other strategic partnership representing a transaction value greater than EUR 200,000.00 (determined per transaction, with related transactions concluded within one year being considered to constitute the same transaction) (or such higher threshold as determined by the Supervisory Board and notified to the Management Board in writing);
 - g.** the taking up of new lines of business or termination or significant limitation of existing lines of business, in either case of the Group, CureVac AG or its Subsidiaries
 - h.** proposing or making any amendment to the Company's articles of association or other internal policies;
 - i.** the adoption, amendment or termination of any equity incentive plan of the Company;
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- j.** proposing or effecting a liquidation, dissolution, restructuring, recapitalization, reorganization or similar transaction;
 - k.** making material proposals for resolutions by the General Meeting, as listed in the Company's articles of association;
 - l.** the issuance or sale of shares or equity securities of the Company or any of its Subsidiaries, except in connection with the ordinary operation of the Company's equity incentive plans;
 - m.** the acquisition, disposal and encumbrance of intellectual property rights and acquisition and granting of licences and sublicenses, if the interest or value of such intellectual property rights, licences or sublicenses exceeds an amount of EUR 200,000.00 (or such higher amount as determined by the Supervisory Board and notified to the Management Board in writing);
 - n.** taking any action towards the incorporation of a Protective Foundation and to grant a customary right to subscribe for preferred shares in the Company's capital to such Protective Foundation (which right would in any event not be exercisable until after the expiration of the later of (i) the Initial Period or (ii) the Initial Approval Period);
 - o.** such other resolutions of the Management Board as the Supervisory Board shall have specified in a resolution to that effect and notified to the Management Board;
 - p.** to appoint or dismiss the senior internal auditor;
 - q.** to approve the audit plan drawn up by the internal audit function;
 - r.** the approval of and changes to the Company's annual budget;
 - s.** the assumption of new branches of operations and cessation of existing activities;
 - t.** the establishment of branches, establishments and subsidiaries outside of Germany and the Netherlands;
 - u.** the hiring, appointment and dismissal of personnel with a gross annual salary of EUR 150,000.00 and the terms concerning such hiring, appointment and dismissal;
 - v.** the determination of compensation in the form of shares or rights to subscribe for shares to personnel and related issuance of securities under an employee incentive plan of the Company; and
 - w.** any transaction entered into or legal act performed by the Company which is outside the ordinary course of business.
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Annex B – Rules for Preserving German Tax Residency

1. The majority of all members of the Management Board shall be resident in Germany.
 2. All Board Meetings must be held in Germany.
 3. If a Board Meeting is held using audio-communication facilities, the majority of the Managing Directors attending such Board Meeting (in person or through audio-communication facilities) must be located in Germany, and none of the Managing Directors attending such Board Meeting (in person or through audio-communication facilities) may be located in the Netherlands, for the duration of such Board Meeting.
 4. A written resolution of the Management Board may be passed, subject to Article 5.14, provided that the majority of the Managing Directors casting a vote in respect of such resolution are located in Germany, and none of the Managing Directors are located in the Netherlands, at the time of casting their vote.
 5. To the extent reasonably practicable, actions performed by Managing Directors in relation to the Company shall generally be performed in Germany.
 6. The rules described in this Annex B may only be deviated from on a case-by-case basis in order to avoid or mitigate a delay in the deliberations and/or decision-making of the Management Board which the Management Board reasonably believes to be contrary to the interests of the Company and its business.
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SUPERVISORY BOARD RULES

CUREVAC N.V.

INTRODUCTION

Article 1

- 1.1 These rules govern the organisation, decision-making and other internal matters of the Supervisory Board. In performing their duties, the Supervisory Directors shall comply with these rules.
- 1.2 These rules shall be posted on the Website.

DEFINITIONS AND INTERPRETATION

Article 2

- 2.1 In these rules the following definitions shall apply:

20% Shareholder Nominee	Any Supervisory Director who has been appointed pursuant to a binding nomination made by a Nomination Concert.
Affiliate	An Affiliate (<i>Aangeslotene</i>) as defined in the Articles of Association.
Article	An article of these rules.
Articles of Association	The Company's articles of association.
Audit Committee	The Company's audit committee.
CEO	The Company's chief executive officer.
Chairman	The chairman of the Supervisory Board.
Change of Control	A Change of Control (<i>Wijziging van Zeggenschap</i>) as defined in the Articles of Association.
Committee	The Audit Committee, the Compensation Committee and the Nomination and Corporate Governance Committee (excluding, for the avoidance of doubt, the Special Committee).
Committee Charter	The charter of the relevant Committee.
Company	CureVac N.V.
Company Secretary	The Company's company secretary.
Compensation Committee	The Company's compensation committee.
Conflict of Interests	A direct or indirect personal interest which conflicts with the interests of the Company and of the business connected with it.

CureVac AG	CureVac AG, registered with the Commercial Register of the Local Court in Stuttgart under HRB 754041, or its legal successors.
dievini	dievini Hopp BioTech holding GmbH & Co. KG, registered with the Commercial Register of the Local Court in Mannheim under HRA 700792, or its legal successors or permitted assigns under the SHA.
dievini Nominee	Any Supervisory Director who has been appointed pursuant to a binding nomination made by dievini.
Diversity Policy	The Company's diversity policy.
External Auditor	The auditor or audit firm within the meaning of Section 2:393 of the Dutch Civil Code, engaged to audit the Company's annual accounts and management report, or the Company's independent outside audit firm for purposes of U.S. laws and regulation (including applicable NASDAQ and/or SEC requirements), as the context may require.
Family Member	A Supervisory Director's spouse, registered partner or other life companion, foster child or any relative or in-law up to the second degree.
General Meeting	The Company's general meeting.
KfW	KfW, a public law institution (<i>Anstalt des öffentlichen Rechts</i>) under German law, having its seat in Frankfurt am Main, Germany, or its legal successors or permitted assigns under the SHA.
KfW Nominee	The Supervisory Director who has been appointed pursuant to a binding nomination made by KfW.
Initial Approval Period	The Initial Approval Period (<i>Initiële Goedkeuringsperiode</i>) as defined in the Articles of Association.
Initial Nomination Period	The Initial Nomination Period (<i>Initiële Nominatieperiode</i>) as defined in the Articles of Association.
Initial Period	The Initial Period (<i>Initiële Periode</i>) as defined in the Articles of Association.
Internal Controls	The Company's internal risk management and control systems, including its disclosure controls and procedures and internal control over financial reporting.
Management Board	The Company's management board.
Managing Director	A member of the Management Board.
NASDAQ	The NASDAQ Stock Market.

Nomination and Corporate Governance Committee	The Company's nomination and corporate governance committee.
Nomination Concert	A Nomination Concert (<i>Nominatie Groep</i>) as defined in the Articles of Association.
Profile	The Company's profile for the size, composition and independence of the Supervisory Board.
Protective Foundation	A foundation under Dutch law whose objective it would be to promote and protect the interests of the Company, the business connected with it and its stakeholders from time to time, and repressing possible influences which could threaten the strategy, continuity, independence and/or identity of the Company or the business connected with it to such an extent that this could be considered to be damaging to the aforementioned interests.
SEC	The United States Securities and Exchange Commission.
SHA	The Shareholders' Agreement originally entered into between KfW, dievini and Mr. Dietmar Hopp and dated the sixteenth day of June two thousand and twenty, as amended from time to time.
Simple Majority	More than half of the votes cast.
Special Committee	A special committee of the Supervisory Board established under and in accordance with these rules and the Articles of Association for the purpose of approval of certain capital measures.
Subsidiary	A subsidiary within the meaning of Section 2:24a DCC.
Supervisory Board	The Company's supervisory board.
Supervisory Board Meeting	A meeting of the Supervisory Board.
Supervisory Director	A member of the Supervisory Board.
Vice-Chairman	The vice-chairman of the Supervisory Board.
Website	The Company's website.

2.2 References to statutory provisions are to those provisions as they are in force from time to time.

2.3 Terms that are defined in the singular have a corresponding meaning in the plural.

2.4 Words denoting a gender include each other gender.

2.5 Except as otherwise required by law, the terms "written" and "in writing" include the use of electronic means of communication.

COMPOSITION

Article 3

- 3.1** The Supervisory Board consists of up to eight Supervisory Directors.
- 3.2** The size, composition and independence of the Supervisory Board shall be determined taking into consideration the principles laid down in the Diversity Policy and the Profile, each of which shall be adopted by the Supervisory Board taking into account the nature of the Company's business and the tasks, duties and competences of the Supervisory Board.
- 3.3** The Supervisory Directors shall be appointed, suspended and dismissed in accordance with the Articles of Association, these rules and applicable law always observing the nomination and designation rights set out in the Articles of Association.
- 3.4** A person may be appointed as Supervisory Director for a maximum of two consecutive terms of up to four years each and, subsequently, for a maximum of two consecutive terms of up to two years each.
- 3.5** The Supervisory Board shall elect a Supervisory Director to be the Chairman and another Supervisory Director to be the Vice-Chairman. The Supervisory Board may dismiss the Chairman or the Vice-Chairman, provided that the Supervisory Director so dismissed shall subsequently continue his term of office as a Supervisory Director without having the title of Chairman or Vice-Chairman, as the case may be.
- 3.6** A Supervisory Director shall promptly resign:
- a.** in the event of inadequate performance, structural incompatibility of interests on the part of such Supervisory Director, and in other instances where early retirement of such Supervisory Director is considered necessary by the Supervisory Board;
 - b.** in respect of all dievini Nominees, upon expiry of the Initial Nomination Period for dievini;
 - c.** in respect of the KfW Nominee, upon expiry of the Initial Nomination Period for KfW; or
 - d.** in respect of a 20% Shareholder Nominee, upon:
 - i.** the shareholder(s) on the basis of whose nomination such 20% Shareholder Nominee was appointed no longer constituting a Nomination Concert; or
 - ii.** such 20% Shareholder Nominee no longer being independent from the relevant Nomination Concert and/or the Company under the standards applicable to the Company under the Dutch Corporate Governance Code and United States securities laws and stock exchange rules.

In addition and without prejudice to the previous provisions of this Article 3.6, if at any time during the Initial Nomination Period for dievini, dievini is entitled to nominate less Supervisory Directors pursuant to its nomination rights under the Articles of Association than the number of dievini Nominees in office at that time, the excess number of dievini Nominee(s) shall promptly resign. In such instance, the Supervisory Board shall select the dievini Nominee(s) who must resign if the dievini Nominees, amongst themselves, do not reach agreement promptly as to who should resign (and the dievini Nominees shall, in such case, be deemed to have a Conflict of Interests in such decision).

- 3.7 The Supervisory Board shall ensure that:
- a. the Company has a sound plan in place for the succession of Managing Directors and Supervisory Directors which is aimed at retaining the appropriate balance in the requisite expertise, experience and diversity on the Management Board and the Supervisory Board; and
 - b. a retirement schedule is prepared in order to avoid, as much as possible and practicable, Supervisory Directors retiring simultaneously.
- 3.8 A Supervisory Director shall notify the Supervisory Board in advance of any other position he wishes to pursue.

DUTIES AND ORGANISATION

Article 4

- 4.1 The Supervisory Board is charged with the supervision of the policy of the Management Board and the general course of affairs of the Company and of the business connected with it. The Supervisory Board shall provide the Management Board with advice. In performing their duties, Supervisory Directors shall be guided by the interests of the Company and of the business connected with it. In doing so, the Supervisory Board shall focus on long-term value creation for the Company and its business and take into account the relevant stakeholder interests.
- 4.2 At least twice per calendar year, as part of the Company's strategy, the Management Board shall discuss the Company's long-term strategy with the Supervisory Board in particular with regard to business operations and/or the management of the Company or its Subsidiaries, including but not limited to (i) taking up new lines of business, (ii) the termination or significant limitation of existing business lines and (iii) any significant transactions between the Company on the one hand and a shareholder or a shareholder's Affiliate on the other hand, which require the approval of the Supervisory Board. As part of those discussions, the Management Board and the Supervisory Board shall consider whether it would be in the best interests of the Company and its business to cause the incorporation of a Protective Foundation and to grant a customary right to subscribe for preferred shares in the Company's capital to such Protective Foundation (which right would in any event not be exercisable until after the expiration of the later of (i) the Initial Period or (ii) the Initial Approval Period).
- 4.3 The Supervisory Board may obtain information from officers and external advisers of the Company in order to perform their duties, and the Company shall facilitate this.
- 4.4 All Supervisory Directors shall follow an induction programme geared to their role, covering general financial, social and legal affairs, financial reporting by the Company, specific aspects that are unique to the Company and its business, the Company's corporate culture, the Company's relationship with employees and the responsibilities of a Supervisory Director under applicable law.
- 4.5 The tasks and duties of the Supervisory Board include the supervision of the following matters:
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- a. the Company's strategy, the implementation thereof and the principal risks associated with it;
- b. the review by the Management Board of the effectiveness of the design and operation of the Internal Controls, including:
 - i. identified material weaknesses or significant deficiencies in the Internal Controls; and
 - ii. material changes made to, and any material improvements planned for, the Internal Controls;
- c. the functioning of, and the developments in, the relationship with the External Auditor;
- d. the establishment and implementation of the internal procedures by the Management Board;
- e. the Company's corporate culture and values;
- f. the amount, level and structure of compensation packages through review of proposals, reports and recommendations of the Compensation Committee
- g. the findings and observations of the Management Board relating to the effectiveness of, and compliance with, the Company's internal policies, including its code of business conduct and ethics;
- h. monitoring the operation of the Company's procedure for reporting actual or suspected misconduct or irregularities, the initiation of appropriate and independent investigations into signs of misconduct or irregularities, and, if an instance of misconduct or an irregularity has been discovered, adequate follow-up of recommendations for remedial actions;
- i. the Company's relations with shareholders; and
- j. deciding on matters proposed or recommended by the Committees pursuant to their respective Committee Charters.

4.6 At least annually, the Supervisory Board shall evaluate - outside the presence of the Managing Directors - its own functioning, the functioning of the Management Board, the functioning of the Committees and the functioning of the individual Managing Directors and Supervisory Directors, shall discuss the conclusions of such evaluations, and shall identify aspects where the Supervisory Directors require further training or education. During such evaluation, Supervisory Directors should be able to express their views confidentially. When performing their evaluations, the Supervisory Directors shall at least consider:

- a. the mutual interaction among the Management Board and the Supervisory Board;
- b. the mutual interaction among the Supervisory Directors;
- c. lessons learned from recent events; and
- d. the desired profile, composition, competency and expertise of the Supervisory Board.

4.7 Each Supervisory Director must treat all information and documentation obtained in connection with his position as Supervisory Director with the utmost discretion, integrity and confidentiality.

CHAIRMAN, VICE-CHAIRMAN AND COMPANY SECRETARY

Article 5

5.1 The Chairman, in regular consultation with the CEO, shall ensure that:

- a.** the Supervisory Board has proper contact with the Management Board, the Company's employee representatives (if any) and the General Meeting;
- b.** the Supervisory Board elects a Vice-Chairman;
- c.** there is sufficient time for deliberation and decision-making by the Supervisory Board;
- d.** the Supervisory Directors receive all information that is necessary for the proper performance of their duties in a timely fashion;
- e.** the Supervisory Board and the Committees function properly;
- f.** the functioning of individual Managing Directors and Supervisory Directors is reviewed at least annually;
- g.** the Supervisory Directors and Managing Directors follow their induction programme, as well as their education or training programme (if and when relevant);
- h.** the Management Board performs activities in respect of corporate culture;
- i.** the Supervisory Board is responsive to signs of misconduct or irregularities from the Company's business and ensures that any material misconduct and irregularities, or suspicions thereof, are reported to the Supervisory Board without delay;
- j.** the General Meeting proceeds in an orderly and efficient manner;
- k.** effective communication with the Company's shareholders is assured; and
- l.** the Supervisory Board shall be involved closely, and at an early stage, in any acquisition, merger or takeover process involving the Company.

5.2 If the Chairman is absent or incapacitated, he may be replaced temporarily by the Vice-Chairman.

5.3 The Chairman shall act on behalf of the Supervisory Board as the primary contact for Managing Directors, Supervisory Directors and shareholders regarding the functioning of Managing Directors and Supervisory Directors, except for the Chairman himself. The Vice-Chairman shall fulfil such role regarding the functioning of the Chairman.

5.4 The Chairman shall consult regularly with the CEO.

5.5 The Supervisory Board may be supported by the Company Secretary. The Company Secretary may be appointed and dismissed by the Management Board, subject to the prior approval of the Supervisory Board.

DECISION-MAKING

Article 6

- 6.1** The Supervisory Board shall meet as often as any Supervisory Director deems necessary or appropriate, but no less than annually and as a rule at least once per calendar quarter.
- 6.2** Supervisory Directors are expected to attend Supervisory Board Meetings and the meetings of the Committees of which they are members. If a Supervisory Director is frequently absent at such meetings, he shall be held accountable by the Supervisory Board.
- 6.3** A Supervisory Board Meeting may be convened by, or at the request of, any Supervisory Director by means of a written notice sent to all Supervisory Directors. Notice of a Supervisory Board Meeting shall include the date, time, place and agenda for that Supervisory Board Meeting. Supervisory Board Meetings can be held through audio-communication facilities. Supervisory Directors attending the Supervisory Board Meeting through audio communication are considered present at the Supervisory Board Meeting.
- 6.4** All Supervisory Directors shall be given reasonable notice of at least five days for all Supervisory Board Meetings, unless a shorter notice is required to avoid a delay which could reasonably be expected to have an adverse effect on the Company and/or the business connected with it.
- 6.5** If a Supervisory Board Meeting has not been duly convened, resolutions may nevertheless be passed at that Supervisory Board Meeting if all Supervisory Directors not present or represented at that Supervisory Board Meeting have waived compliance with the convening formalities in writing.
- 6.6** The Supervisory Director convening a Supervisory Board Meeting shall set the agenda for that Supervisory Board Meeting. Other Supervisory Directors may submit agenda items to the Supervisory Director convening the Supervisory Board Meeting.
- 6.7** All Supervisory Board Meetings shall be chaired by the Chairman or, in his absence, by the Vice-Chairman or, in his absence, by another Supervisory Director designated by the Supervisory Directors present at the relevant Supervisory Board Meeting. The chairman of the Supervisory Board Meeting shall appoint a secretary to prepare the minutes of the proceedings at such Supervisory Board Meeting. The secretary does not necessarily need to be a Supervisory Director.
- 6.8** Minutes of the proceedings at a Supervisory Board Meeting shall be sufficient evidence thereof and of the observance (or waiver) of all necessary formalities, provided that such minutes are certified by a Supervisory Director. Resolutions of a Supervisory Board Meeting can also be evidenced by a statement signed by the chairman and the secretary of that Supervisory Board Meeting.
- 6.9** Without prejudice to Article 6.14, each Supervisory Director may cast one vote in the decision-making of the Supervisory Board. Invalid votes, blank votes and abstentions shall not be counted as votes cast.
- 6.10** A Supervisory Director can be represented by another Supervisory Director holding a written proxy for the purpose of the deliberations and the decision-making of the Supervisory Board.
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- 6.11** Resolutions of the Supervisory Board shall be passed, irrespective of whether this occurs at a Supervisory Board Meeting or otherwise, by Simple Majority, unless these rules provide differently.
- 6.12** A resolution of the Supervisory Board to approve a resolution of the Management Board to exclude or limit pre-emption rights (except in connection with the ordinary operation of the Company's equity incentive plans) or to implement an issuance of shares in the Company's capital against non-cash contribution (under article 7.2 paragraph b. of the Articles of Association) shall require the approval of the Special Committee with the affirmative vote of (i) during the Initial Nomination Period for dievini, the dievini Nominee who is a member of the Special Committee and (ii) during the Initial Nomination Period for KfW, the KfW Nominee. In this respect, the Supervisory Board shall sufficiently in advance involve the Special Committee in the deliberations and decision-making concerning the matters referred to in the previous sentence.
- 6.13** The following resolutions of the Supervisory Board shall require the affirmative vote of (i) during the Initial Nomination Period for dievini, at least one dievini Nominee and (ii) during the Initial Nomination Period for KfW, the KfW Nominee:
- a.** amendments of or supplements to these rules and allowing temporary deviations from these rules;
 - b.** issuance of shares in case the Supervisory Board is authorised by the General Meeting for this purpose in accordance with Article 6.1 of the Articles of Association or needs to approve a resolution to issue shares by the Management Board;
 - c.** the determination of whether a Change of Control has occurred;
 - d.** the determination of whether the Initial Period has expired;
 - e.** the determination of whether an Initial Nomination Period has expired;
 - f.** the determination of whether the Initial Approval Period has expired; and
 - g.** during the Initial Approval Period, the approval of a resolution of the Management Board concerning:
 - i.** any proposal to the General Meeting of any amendment to the text or purport of articles 18.9, 18.11, 21.2, 22.1 through 22.5 and/or 22.8 of the Articles of Association, or the definitions used in those articles;
 - ii.** any amendment to the text or purport of the internal rules of the Management Board;
 - iii.** any of the matters described in article 18.11 of the Articles of Association and make decisions on materiality under Article 18.11 paragraphs b, c and d of the Articles of Association.
- 6.14** Resolutions of the Supervisory Board on any of the matters described in Article 18.9(e) of the Articles of Association shall not be taken, during the Initial Approval Period, if collectively, (i) at least one dievini Nominee and (ii) the KfW Nominee vote against a matter as aforementioned.
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- 6.15** Where there is a tie in any vote of the Supervisory Board, the Chairman shall have a casting vote, provided that there are at least three Supervisory Directors in office. Otherwise, the relevant resolution shall not have been passed.
- 6.16** Resolutions of the Supervisory Board may, instead of at a Supervisory Board Meeting, be passed in writing, provided that all Supervisory Directors are familiar with the resolution to be passed and none of them objects to this decision-making process. Articles 6.9 through 6.15 apply *mutatis mutandis*.
- 6.17** The Supervisory Board may require that officers and external advisers attend Supervisory Board Meetings. In particular, the Supervisory Board shall request the External Auditor to attend the Supervisory Board Meeting where the External Auditor's audit report regarding the Company's financial statements is discussed.
- 6.18** If and when dievini, KfW or a Nomination Concert nominates an individual for appointment as a Supervisory Director in accordance with the Articles of Association, such individual shall, upon request of the relevant nominator, have the right to attend any meeting of the Supervisory Board and any of its Committee meetings, where applicable, as an observer without voting rights until such individual has been appointed as member of the Supervisory Board, provided that such individual agrees with the Company to be bound by customary confidentiality with respect to any information received by that individual as an observer.
- 6.19** If, for whatever reason, there is no dievini Nominee and/or no KfW Nominee in office at the Supervisory Board or as member of the Special Committee, as the case may be, during the Initial Nomination Period for dievini or KfW, as relevant, and a decision needs to be taken with respect to any matter referred to in Articles 6.12 and 6.13, then the Supervisory Board shall request dievini or KfW, as applicable, to designate a temporary replacement under article 21.4 of the Articles of Association and, if such temporary replacement is not designated within a period of four weeks, shall, as soon as reasonably practicable, convene a General Meeting and submit such matter to the General Meeting for the decision. In case a temporary replacement is designated by dievini or KfW, as applicable, in accordance with the first full sentence of this Article 6.18 and article 21.4 of the Articles of Association, such person will for the purpose of Articles 6.12 and 6.13 be deemed to be the dievini Nominee or KfW Nominee, as applicable.
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CONFLICT OF INTERESTS

Article 7

- 7.1 A Supervisory Director shall promptly report any actual or potential Conflict of Interests in a transaction that is of material significance to the Company and/or such Supervisory Director to the other Supervisory Directors, providing all relevant information relating to such transaction, including the involvement of any Family Member.
- 7.2 The determination whether a Supervisory Director has a Conflict of Interests shall primarily be the responsibility of that Supervisory Director. However, in case of debate, that determination shall be made by the Supervisory Board without the Supervisory Director concerned being present.
- 7.3 A Supervisory Director shall not participate in the deliberations and decision-making of the Supervisory Board on a matter in relation to which he has a Conflict of Interests. If, as a result thereof, no resolution can be passed by the Supervisory Board, the resolution may nevertheless be passed by the Supervisory Board as if none of the Supervisory Directors has a Conflict of Interests.
- 7.4 Transactions in respect of which a Supervisory Director has a Conflict of Interests shall be agreed on arms' length terms. Any such transactions where the Conflict of Interests is of material significance to the Company and/or to the Supervisory Director concerned shall be subject to the approval of the Supervisory Board.
- 7.5 In order to avoid potential Conflicts of Interests, or the appearance thereof, Supervisory Directors shall not:
- a. enter into competition with the Company;
 - b. demand or accept substantial gifts from the Company for themselves or for their respective Family Members;
 - c. provide unjustified advantages to third parties to the detriment of the Company;
 - d. take advantage of business opportunities to which the Company would be entitled for themselves or for their respective Family Members.
- 7.6 The Company shall not grant its Supervisory Directors or their respective Family Members any personal loans, guarantees or similar financial arrangements.
- 7.7 The Supervisory Board shall deal with any actual or potential Conflict of Interest in a transaction that is of material significance to the Company and/or a Managing Director in accordance with the provisions included in the Management Board Rules.
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OWNERSHIP OF AND TRADING IN FINANCIAL INSTRUMENTS

Article 8

- 8.1** The Supervisory Directors shall be subject to the Company's insider trading policy. In addition, each Supervisory Director shall practice great reticence:
- a.** when trading in shares or other financial instruments issued by another listed company, if this could reasonably create the appearance of such Supervisory Director violating applicable insider trading and/or market manipulation prohibitions; and
 - b.** when trading in shares or other financial instruments issued by another listed company which is a direct competitor of the Company.
- 8.2** Any shares in the Company's capital held by a Supervisory Director are expected to be long-term investments.

COMMITTEES

Article 9

- 9.1** The Supervisory Board has established the Audit Committee, the Compensation Committee and the Nomination and the Corporate Governance Committee and the Special Committee and may establish such other committees as deemed necessary or appropriate by the Supervisory Board.
- 9.2** The Special Committee shall be established for the purposes described in these rules, *inter alia*, to approve certain capital measures. The Special Committee consists of:
- a.** during the Initial Nomination Period for dievini, one dievini Nominee (selected by the Supervisory Board in case there is more than one dievini Nominee);
 - b.** during the Initial Nomination Period for KfW, the KfW Nominee; and
 - c.** as long as the Supervisory Board comprises at least one 20% Shareholder Nominee, one 20% Shareholder Nominee (selected by the Supervisory Board in case there is more than one 20% Shareholder Nominee).
- 9.3** Each Committee shall be subject to this Article 9 and its respective Committee Charter.
- 9.4** Unless the relevant Committee Charter provides differently, Article 6 applies mutatis mutandis to the decision-making of each Committee, provided that references to the Chairman should be interpreted as being references to the chairman of the relevant Committee.
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9.5 The Supervisory Board shall regularly review and discuss the reports received from the respective Committees.

9.6 For the avoidance of doubt, Articles 9.3 through 9.5 do not apply to the Special Committee. The tasks, duties, organization and decision-making of the Special Committee is governed exclusively by these rules, to the extent they refer to the Special Committee.

AMENDMENTS AND DEVIATIONS

Article 10

Pursuant to a resolution to that effect, subject to Article 6.13, the Supervisory Board may amend or supplement these rules and allow temporary deviations from these rules, subject to ongoing compliance with NASDAQ requirements, SEC rules and applicable law generally.

GOVERNING LAW AND JURISDICTION

Article 11

These rules shall be governed by and shall be construed in accordance with the laws of the Netherlands. Any dispute arising in connection with these rules shall be submitted to the exclusive jurisdiction of the competent court in Amsterdam, the Netherlands.

- (1) **CureVac AG**
 - (2) **dievini Hopp BioTech holding GmbH & Co. KG**
 - (3) **Bill & Melinda Gates Foundation**
 - (4) **Dr. Ingmar Hoerr**
 - (5) **Dr. Florian von der Mülbe**
 - (6) **Dr. Wolfgang Klein**
 - (7) **Prof. Dr. Hans-Georg Rammensee**
 - (8) **Prof. Dr. Günther Jung**
 - (9) **Prof. Dr. Friedrich von Bohlen und Halbach**
 - (10) **Dr. Hans Christoph Tanner**
 - (11) **Scottish Mortgage Investment Trust plc**
 - (12) **Vanguard World Fund**
 - (13) **Vanguard Variable Insurance Funds**
 - (14) **Jupiter Partners LP**
 - (15) **Harborside Creek Ltd**
 - (16) **Vico Holdings Ltd**
 - (17) **ELMA Investments Ltd**
 - (18) **Chartwave Limited**
 - (19) **Chelt Trading Limited**
 - (20) **Landeskreditbank Baden-Württemberg – Förderbank –**
 - (21) **LBBW Asset Management Investmentgesellschaft mbH acting on behalf of the fund “LBBW AM-VA-Aktien Global Value/Total Return (EFA) Segment 1”**
 - (22) **Lilly Global Nederland Holdings B.V.**
 - (23) **Genmab A/S**
 - (24) **KfW**
 - (25) **Glaxo Group Limited**
 - (26) **Qatar Holding LLC**
 - (27) **FCP Biotech Holding GmbH**
 - (28) **CureVac B.V.**
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INVESTMENT AND SHAREHOLDERS' AGREEMENT

between

1. **CureVac AG**, with registered offices in Tübingen, registered with the commercial register of the Stuttgart local court under HRB 754041, Friedrich-Miescher-Straße 15, 72076 Tübingen ("**Corporation**"),
2. **dievini Hopp BioTech holding GmbH & Co. KG**, with registered offices in Walldorf, Johann-Jakob-Astor-Str. 57, 69190 Walldorf ("**dievini**"),
3. **Bill & Melinda Gates Foundation**, 500 5th Ave N., Seattle, WA 98109 ("**BMGF**"),
4. **Dr. Ingmar Hoerr**,
5. **Dr. Florian von der Mülbe**, (also referred to below as "**Managing Shareholder**"),
6. **Dr. Wolfgang Klein**,
7. **Prof. Dr. Hans-Georg Rammensee**,
8. **Prof. Dr. Günther Jung**,
9. **Prof. Dr. Friedrich von Bohlen und Halbach**,
10. **Dr. Hans Christoph Tanner**,
11. **Scottish Mortgage Investment Trust plc**, a trust incorporated under the laws of Scotland acting through Baillie Gifford & Co, its agent with address Calton Square, 1 Greenside Row, Edinburgh, EH1 3AN ("**SMI**"),
12. **Vanguard World Fund**, a Delaware statutory trust on behalf of its series of shares known as the Vanguard International Growth Fund, acting through Baillie Gifford Overseas Limited, its agent, with address Calton Square, 1 Greenside Row, Edinburgh, EH1 3AN ("**Vanguard 1**"),
13. **Vanguard Variable Insurance Funds**, a Delaware statutory trust on behalf of its series of shares known as the International Portfolio, acting through Baillie Gifford Overseas Limited, its agent, with address Calton Square, 1 Greenside Row, Edinburgh, EH1 3AN ("**Vanguard 2**"),

14. **Jupiter Partners LP**, a Canadian limited partnership with address 199, Bay Street, Suite no. 4000, Toronto (Ontario), M5L 1A9, Canada, (“**Jupiter**”),
15. **Harborside Creek Ltd.**, a Bahamian limited partnership with address One Montague Place, East Bay Street, P.O. Box, N-4906 Nassau, The Bahamas (“**Harborside**”),
16. **Vico Holdings Ltd.**, a Cayman Islands limited liability company with address at P.O. Box 10741, 3rd Floor – Cayman Corporate Centre, 27 Hospital Rd, George Town, Grand Cayman, Cayman Islands KY1-1007 (“**Vico**”),
17. **ELMA Investments Ltd.**, a Cayman Islands limited liability company with address at P.O. Box 10741, 3rd Floor – Cayman Corporate Centre, 27 Hospital Rd, George Town, Grand Cayman, Cayman Islands KY1-1007 (“**ELMA**”),
18. **Chartwave Limited**, a British Virgin Islands limited liability company with address Trident Chambers, P.O. Box 146, Road Town, Tortola, British Virgin Islands (“**Chartwave**”),
19. **Chelt Trading Limited**, a British Virgin Islands company with address at c/o Overseas Management, Company Trust (BVI) Ltd, Palm Chambers 3, P.O. Box 3152, Road Town, Tortola, British Virgin Islands (“**Chelt Trading**”),

(SMI, Vanguard 1, Vanguard 2, Jupiter, Harborside, ELMA, Vico, Chartwave and Chelt Trading also referred to together below as “**Series B Investors 2015**” or each a “**Series B Investor 2015**”),
20. **Landeskreditbank Baden-Württemberg – Förderbank** – a German independent public law institution (*Anstalt des öffentlichen Rechts*) with address Schlossplatz 10, 76131 Karlsruhe, Germany (“**L-Bank**”),
21. **LBBW Asset Management Investmentgesellschaft mbH**, a German AIF management company pursuant to the meaning given in the German Capital Investment Code (*Kapitalanlagegesetzbuch* - “**KAGB**”), acting on behalf of the fund “**LBBW AM-VA-Aktien Global Value/Total Return (EFA) Segment 1**” (the “**Fund**”), with address Fritz-Elsas-Straße 31, 70174 Stuttgart, Germany (“**LBBW AM**”),

(L-Bank and LBBW AM also referred to below as “**Series B Investors 2016**” and each a “**Series B Investor 2016**”),

22. **Lilly Global Nederland Holdings B.V.**, a Dutch limited liability company with address at Papendorpseweg 83, 3528 BJ, Utrecht, Netherlands (“**Lilly**” or “**Series B Investor 2017**”),
23. **Genmab A/S**, CVR. no. 2102 3884, a Danish corporation, having a place of business at Kalvebod Brygge 43, DK-1560 Copenhagen (“**Genmab**” or “**Series B Investor 2019**”),
24. **KfW**, a German independent public law institution (*Anstalt des öffentlichen Rechts*) with address Palmengartenstrasse 5-9, 60325 Frankfurt am Main, Germany (“**KfW**”),
25. **Glaxo Group Limited**, an English limited liability corporation with address at 980 Great West Road, TW8 9GS Brentford, Middlesex, United Kingdom (“**GSK**”),
26. **Qatar Holding LLC**, a company established pursuant to the regulations of the Qatar Financial Centre and licensed by the Qatar Financial Centre Authority with registration number 00004, with its address at Ooredoo Tower (Building 14), Al Dafna Street (Street 801), Al Dafna (Zone 61), Doha, Qatar (“**QIA**”),
27. **FCP Biotech Holding GmbH**, a German limited liability company with address Freihamer Straße 2, D-82166 Gräfelfing, Germany (“**FCP**”),
28. **CureVac B.V.**, a Dutch limited liability company with business address at Friedrich-Miescher-Straße 15, D-72076 Tübingen, Germany, which is intended to be converted to a public limited liability company (*naamloze vennootschap*) under Dutch law under the name of CureVac N.V. (CureVac B.V. and CureVac N.V., as the case may be, hereinafter referred to as “**CureVac NL**”);
 - parties 24 - 27 as well as parties 14 through 19 and 21, relative to their respectively subscribed Series B Investors 2020 Shares, also referred to as “**Series B Investors 2020**” or collectively with the Series B Investor 2019, the Series B Investor 2017, the Series B Investors 2016 and the Series B Investors 2015, as “**Investors**” or each an “**Investor**” -
 - parties 2 - 10 are also referred to below as “**Existing Shareholders 2015**”; the Existing Shareholders 2015 together with parties 11 - 23 also collectively referred to as “**Existing Shareholders**” -
 - parties 4 - 8 are also referred to below as “**Founders**” -
 - parties 1 - 28 are also referred to as the “**Parties**” or each as a “**Party**” -
 - parties 2 - 27 are also collectively referred to as “**Shareholders**” or each as a “**Shareholder**”.

List of Annexes

Annex 2.1(a)	Series B Investors 2020 Shares
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Annex 2.4	Sample Written Declaration (<i>Zeichnungsschein</i>)
Annex 5.2(d)	Agreements with Present/Former Employees regarding participation in Results of the Corporation
Annex 5.2(e)	Convertible Loan
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Schedule 1	Form of PFIC Statement

PREAMBLE:

- (A) The Corporation develops and protects a technology which renders messenger RNA (mRNA) therapeutically usable. The technology has been tested on animal subjects and in clinical experiments for medically relevant therapeutic application in humans. This method and the data generated form the basis of the commercial objective of the Corporation which primarily consists of developing and licensing suitable product candidates to pharmaceutical companies, in particular in the field of vaccination against the Corona-Sars 2 virus and vaccination against other infectious diseases as well as cancer therapy (the “**Object of Business**”).
- (B) A substantial success factor for the further development of the Corporation, in particular the further economic development, is the sufficient scale production of mRNA to achieve competitive prices. It is therefore required not only to modify the Corporation’s current production process to a production process which is focused on a higher output but also to complement the production unit with a second production site that has the ability to ensure commercial supply to the market.
- (C) BMGF is committed to accelerating the development of lifesaving and low-cost vaccines and drugs to reduce the burden of disease in low-income and lower middle-income countries (such countries on The World Bank list (<http://www.worldbank.org/data/countryclass/classgroups.htm>) at the date of its becoming a Shareholder the “**Access Countries**”) in furtherance of its mission to help all people lead healthy, productive lives. In furtherance of its mission BMGF has provided the Corporation with the BMGF Funds (as defined below). Beyond the corporate relationship, BMGF and the Corporation intend to cooperate increasingly in joint projects in the future to further BMGF’s charitable mission. The full particulars of that cooperation between the Corporation and BMGF are laid down in a separate global access commitments agreement (“**Global Access Agreement**”).
- (D) The Investors are committed to accelerate the development of CureVac’s technology platform and related products.
- (E) The Series B Investors 2015 provided to the Corporation altogether EUR 98,745,814.44 (in words: ninety eight million seven hundred forty five thousand eight hundred fourteen Euros and forty four Eurocents) on the basis of an investment and shareholders’ agreement dated 2 October 2015; the Series B Investors 2016 provided to the Corporation altogether EUR 26,497,909.00 (in words: twenty-six million four hundred ninety-seven thousand nine hundred nine Euros) on the basis of an amended investment and shareholders’ agreement dated 14 October 2016. The Series B Investor 2017 provided to the Corporation equity in an aggregate amount of EUR 45,000,000.00 (in words: forty five million Euros), on the basis of an amended investment and shareholders’ agreement dated 13 October 2017. The Series B Investor 2019 provided to the Corporation cash equity in an overall amount of EUR 20,000,000.00 (in words: twenty million Euros), on the basis of an amended investment and shareholders’ agreement dated 18 December 2019.

- (F) The Series B Investors 2020 intend to invest in the Corporation an aggregate amount of up to EUR 559,279,809.00 (“**Series B Investors 2020 Overall Contribution**”), subject to the provisions of this Agreement.
- (G) KfW intends to invest EUR 299,998,809.00 against the issuance of 224,466 Series B Shares.
- (H) GSK intends to invest EUR 149,999,404.50 against the issuance of 112,233 Series B Shares.
- (I) QIA intends to invest EUR 59,999,494.50 against the issuance of 44,893 Series B Shares.
- (J) FCP intends to invest EUR 19,999,386.00 against the issuance of 14,964 Series B Shares.
- (K) Jupiter intends to invest EUR 1,762,843.50 against the issuance of 1,319 Series B Shares.
- (L) Harborside intends to invest EUR 1,762,843.50 against the issuance of 1,319 Series B Shares.
- (M) Vico intends to invest EUR 4,999,846.50 against the issuance of 3,741 Series B Shares.
- (N) ELMA intends to invest EUR 9,999,693.00 against the issuance of 7,482 Series B Shares.
- (O) Chartwave intends to invest EUR 4,999,846.50 against the issuance of 3,741 Series B Shares.
- (P) Chelt Trading intends to invest EUR 1,758,834.00 against the issuance of 1,316 Series B Shares.
- (Q) LBBW AM intends to invest EUR 3,998,808.00 against the issuance of 2,992 Series B Shares.
- (R) In preparation of the proposed IPO, the Shareholders intend to contribute all their Shares in the Corporation to CureVac NL (“**NL Contribution**”) leading to CureVac NL becoming the sole shareholder of the Corporation and the Shareholders becoming the sole shareholders of CureVac NL holding proportionally the same interests in CureVac NL as in the Corporation. The Parties agree that, upon effectiveness of the NL Contribution, this Agreement shall apply to CureVac NL, to the greatest extent legally permitted (i) prior to and until the date of the first listing in the event of an IPO and (ii) as per the date of first listing in the event of an IPO, with limited content as set forth in this Agreement, in each case as provided in lit. (i) and (ii) above, in the same manner as it applies to the Corporation.

Now therefore, the Parties agree as follows:

DEFINITIONS

Whereas certain terms have been defined throughout this Agreement (as defined in Section 1.6), the following terms shall have the definitions set forth below:

“**Accession Agreement**” shall have the meaning given to it in Section 27.1.

“**Affiliate**”, except as otherwise defined herein, means any individual person or legal entities who or which are affiliated enterprises (*verbundene Unternehmen*) within the meaning of §§ 15 et seq. AktG and includes in case of KfW also the Federal Republic of Germany and its special estates (*Sondervermögen*), corporate bodies (*Körperschaften*), institutions (*Anstalten*) as well as their respective Affiliates (“**KfW Affiliates**”).

“**AktG**” means the German Stock Corporation Act (*Aktiengesetz*).

“**Applicable Fund Laws**” means (i) the United States Investment Company Act of 1940 (the “**Investment Company Act**”), and regulations promulgated thereunder, and (ii) all other statutes, enactments, acts of legislature or parliament, ordinances, rules, by-laws, regulations, notifications, guidelines, policies, directions, directives, rulings and orders of any government, statutory authority, tribunal, arbitration body, board, court whether in the United States or any other jurisdiction applicable to the operations of the Mutual Fund Investors.

“**Articles**” means the Articles of Association (*Satzung*) of the Corporation in the respective applicable version.

“**Articles NL**” means the Articles of Association (*statuten*) of CureVac NL in the respective applicable version.

“**Banking Day**” means every day on which it is customary for banks in Frankfurt am Main to be open.

“**Baillie Gifford & Co**” means Baillie Gifford & Co, a Scottish partnership with its principal place of business at Calton Square, 1 Greenside Row, Edinburgh, EH1 3AN, the United Kingdom.

“**Baillie Gifford Entities**” means any of Baillie Gifford & Co, the Baillie Gifford Funds, and each of their respective Affiliates from time to time.

“**Baillie Gifford Funds**” means, collectively and acting severally (and not jointly), SMI, Vanguard 1 and Vanguard 2, and, in each case, their successors in title from time to time following a transfer conducted pursuant to the terms of this Agreement (including, but not limited to, any transfer made pursuant to Sections 17.3 or 17.5(d)).

“**BGB**” means the German Civil Code (*Bürgerliches Gesetzbuch*).

“**BMGF Tranche I Series B Shares**” means 23,321 Series B Shares (originally with serial no. 21 through 23,341) acquired by BMGF under the amendment to the investment and shareholders’ agreement dated February 13, 2015 (deed-roll no. 27/2015 of the notary Dr. Jochen Scheel in Frankfurt).

“**Change in Control**” means as defined in Section 10.8.

“**Competitor**” means any person, legal entity or its respective Affiliates (including subsidiaries) who (i) conduct a business that is substantially similar to and/or in competition with the Corporation’s Object of Business (including the commercialisation of products developed), as amended, from time to time (whether at the date of this Agreement or subsequently) or (ii) is invested as a shareholder in a competing business as set forth in lit. (i) above. In any event, KfW and KfW Affiliates as well as GSK and any Affiliates of GSK as well as QIA and the Affiliates of QIA shall not be considered as Competitors.

“**dievini Tranche II Series B Shares**” means 21,777 Series B Shares (originally with serial no. 23,379 through 45,155) in the Corporation acquired by dievini under the amendment to the investment and shareholders’ agreement dated February 13, 2015, as of July 15, 2015 (deed-roll no. 128/2015 of the notary Dr. Jochen Scheel in Frankfurt) respectively, the corresponding number of Shares in CureVac NL issued to dievini in place of such Series B Shares in the Corporation.

“**Encumbrances**” means all pledges, charges, liens or security interests having similar effect, mortgages, pre-emption rights, rights of first refusal, options, sell or buy-out rights or similar, except for the rights to sell/purchase and to assign/transfer 1/3 of the dievini Tranche II Series B Shares held by dievini from dievini to BMGF as set forth in the notarial transfer agreement between dievini and BMGF (deed no. 129/2015 of the notary Dr. Jochen Scheel, Frankfurt am Main) dated 15 July 2015 and labelled as Permitted Transfer pursuant to Section 17.5(c) herein.

“**Exit Shareholder**” means as defined in Section 20.1.

“**HGB**” means German Commercial Code (*Handelsgesetzbuch*).

“**IP Rights**” means as defined in Section 25.1.

“**Knowledge of**” or other derivations of “know” with respect to a Party means the knowledge of a person which such person obtained after diligent inquiry or could have obtained had he made due inquiry with the care and diligence of a prudent businessman within the meaning of § 93 par. 1 AktG of the individuals and representatives in charge of the respective subject matters unless stated in this Agreement that actual knowledge is relevant in the specific context.

“**Licensed-in IPR**” means intellectual property rights owned by a third party (including software) which the Corporation has been licensed to use from such third party.

“**Major Shareholder**” means as defined in Section 22.6.

“**Management Board**” means as defined in Section 12.1 in conjunction with Section 12.3.

“**Managing Shareholder**” means Dr. Florian von der Mülbe.

“**Material Adverse Change**” means any change, circumstance or event that occur or become known which – individually or in connection with other changes, circumstances or events – have a material adverse effect on the net assets, financial condition or results of operation, business operations or business prospects of the Corporation or cause such effects to be expected.

“**Mutual Fund Investors**” means Baillie Gifford & Co and the Baillie Gifford Funds.

“**NL Contribution**” means as defined in Section 1.3.

“**Platform Technology**” means the Corporation’s technology for development of prophylactic and therapeutic mRNA vaccines and drugs against infectious diseases and vaccine adjuvants, comprised of long, non-coding RNA molecules and formulation/delivery technology necessary to develop the mRNA vaccines and drugs. For the avoidance of doubt the intent of the Parties is that development activities will include the full process from pre-clinical development to delivery.

“**Recognized Stock Exchange**” means any regulated market in the European Union within the meaning of Article 4, paragraph 1, point 14 of Directive 2004/39/EC, the London Stock Exchange, the New York Stock Exchange, NASDAQ or Hong Kong Stock Exchange.

“**Registration Statement**” means a registration statement or registration statements of the Corporation and/or the entity into which the shares in the Corporation have been contributed filed with the SEC under the US Securities Act of 1933 covering shares beneficially owned by a Major Shareholder.

“**Resolutions**” means as defined in Section 2.1.

“**Sale Shares**” means as defined in Section 17.2.

“**Shareholder**” means any of the parties under nos. 2 - 27.

“SEC” means the US Securities and Exchange Commission.

“Shares” means any no-par value shares (*nennwertlose Stückaktien*) in the Corporation issued by the Corporation from time to time as well as any shares in CureVac NL issued by CureVac NL (regardless of its legal form) from time to time.

“Subsidiary” means any and all companies controlled by the Corporation from time to time, whether at the date of this Agreement or subsequently, with “control” meaning directly or indirectly owning or controlling at least 50% of such companies’ voting stock, or possessing the power to direct or to cause the direction of such companies’ management and policies.

“Supervisory Board” means as defined in Section 13.1 in conjunction with Section 13.13.

“Tag Along Shareholder” means as defined in Section 18.

“Third Party” means any person other than any Shareholder in the Corporation or the Corporation or other than any person which directly or indirectly controls or is controlled by any Shareholder or its Affiliates.

I. INVESTMENT

1. CURRENT INVESTMENT RATIOS IN THE CORPORATION

- 1.1 The Corporation is registered with the commercial register of the Stuttgart local court under HRB 754041. As set forth in Section 1.3 below, its registered share capital (*Grundkapital*) amounts to EUR 742,937.00 and is divided into a total number of 742,937 Shares, of which 23,400 Shares are Series A Shares (as defined below), 705,037 Shares are Series B Shares (as defined below), and 14,500 Shares are Series C Shares (as defined below). The registered share capital has been fully contributed and has neither directly nor indirectly been paid back.
- 1.2 CureVac B.V. is registered with the commercial register of the Chamber of Commerce (*Kamer van Koophandel*) under no. 77798031. Its registered share capital amounts to EUR 0.12 and is divided into one (1) share. The sole shareholder of CureVac B.V. as of the date of this Agreement is Dr. Franz-Werner Haas. The registered share capital has been fully contributed and has neither directly nor indirectly been paid back.
- 1.3 The Parties agree that, upon effectiveness of the NL Contribution, this Agreement shall apply to CureVac NL in the same manner as it applies to the Corporation to the greatest extent legally permitted.
- 1.4 The Founders and other Existing Shareholders 2015 have same-level shares without special rights (“**Series A Shares**”). dievini and BMGF as well as Prof. Dr. Günther Jung and Prof. Dr. Hans-Georg Rammensee likewise hold Series A Shares as well as shares with special rights, which were also granted to the Series B Investors 2015, the Series B Investors 2016, the Series B Investor 2017 and the Series B Investor 2019, as the case may be, by means of the investment agreement dated 15 December 2005 and the investment and shareholders’ agreement dated 13 February 2015 as amended (i) by the amendment to the investment and shareholders’ agreement dated 15 July 2015, (ii) by the investment and shareholders’ agreement dated 2 October 2015, (iii) by the investment and shareholders’ agreement dated 14 October 2016, (iv) by the investment and shareholders’ agreement dated 13 October 2017 and (v) by the investment and shareholders’ agreement dated 18 December 2019 (collectively the “**Investment and Shareholders’ Agreement**”) (“**Series B Shares**”). Furthermore, the Managing Shareholder and the Party under no. 4 hold “**Series C Shares**” with preferential liquidation rights. Upon consummation of the measures set forth in Sections 2 and 3 below, the Series B Investors 2020 Shares (as defined below) issued for the benefit of the Series B Investors 2020 shall also be Series B Shares with all rights attached thereto under this Agreement and the Articles.

- 1.5 Since registration of the last capital increase on 18 February 2020 and accession of the Series B Investor 2019 to the Corporation the Existing Shareholders were invested in the Corporation's registered share capital as follows:

Shareholder	Number of Shares	Series of Shares	Nominal Amount (in EUR)
dievini Hopp BioTech holding GmbH & Co. KG	585,537	B	585,537
dievini Hopp BioTech holding GmbH & Co. KG	13,926	A	13,926
Dr. Ingmar Hörr	8,400	C	8,400
Dr. Ingmar Hörr	85	A	85
Dr. Florian von der Mülbe	6,100	C	6,100
Dr. Florian von der Mülbe	62	A	62
Dr. Wolfgang Klein	1,919	A	1,919
Prof. Dr. Friedrich von Bohlen und Halbach	1,818	A	1,818
Dr. Hans Christoph Tanner	1,414	A	1,414
Prof. Dr. Hans-Georg Rammensee	40	B	40

Shareholder	Number of Shares	Series of Shares	Nominal Amount (in EUR)
Prof. Dr. Hans-Georg Rammensee	1,415	A	1,415
Prof. Dr. Günther Jung	50	B	50
Prof. Dr. Günther Jung	2,526	A	2,526
Bill & Melinda Gates Foundation	23,321	B	23,321
Bill & Melinda Gates Foundation	235	A	235
SMI	11,710	B	11,710
Vanguard 1	12,600	B	12,600
Vanguard 2	1,452	B	1,452
Jupiter	2,927	B	2,927
Harborside	5,855	B	5,855
Vico	4,684	B	4,684
ELMA	2,342	B	2,342
Chartwave	2,342	B	2,342
Chelt Trading	2,342	B	2,342
L-Bank	5,855	B	5,855
LBBW AM	6,557	B	6,557
Lilly	21,078	B	21,078
Genmab A/S	16,345	B	16,345
			<u>742,937</u>

- 1.6 With this investment and shareholders' agreement (this "**Agreement**"), the Parties intend to set forth their mutual rights and duties and to supplement the provisions contained in the Articles.

2. SERIES B CAPITAL INCREASE 2020, SUBSCRIPTION FOR SHARES WITH PREFERENTIAL RIGHTS

2.1 For the purpose of admitting the Series B Investors 2020 as shareholders into the Corporation (as further set out in Section 2.3), immediately following this Agreement becomes legally effective, waiving all form and notice provisions with regard to holding a shareholders' meeting (*Hauptversammlung*) and with regard to the passing of shareholders' resolutions, the Existing Shareholders will hold a shareholders' meeting of the Corporation and unanimously pass the following notarized (*notariell beurkundet*) resolution as well as separate notarized resolutions for each of the Series A Shares, Series B Shares and Series C Shares (collectively, the "**Resolutions**"):

- (a) In return for cash contributions, the current share capital of the Corporation of EUR 742,937.00 (the "**Current Share Capital**") shall be increased by the issuance of 418,466 new no-par value shares (*nennwertlose Stückaktien*) (the "**Series B Investors 2020 Shares**" and such capital increase, the "**Series B Capital Increase 2020**"). On the basis of a pre-money valuation of the Corporation of EUR 1.000,000,000.00 (in words: one billion Euros) ("**Series B 2020 Valuation**") the number of Series B Investors 2020 Shares to be issued and the resulting Series B Investors 2020 Overall Contribution will be calculated based on the agreed share price for a Share of EUR 1,336.50 (in words: one thousand three hundred thirty six Euros fifty Eurocents) (the "**Share Price**"). Accordingly, the number of Series B Investors 2020 Shares issued to the Series B Investors 2020 will be calculated by dividing the amount of EUR 559,279,809.00 (in words: [five hundred fifty nine million two hundred seventy nine thousand eight hundred and nine] Euros) by the Share Price amounting to 418,466 Series B Investors 2020 Shares. The numbers of shares (*Stückzahlen*) of the Series B Investors 2020 Shares to be acquired by each Series B Investor 2020 is set out in **Annex 2.1(a)**.
- (b) The Series B Investors 2020 Shares shall carry the right to dividends from the beginning of the financial year in which the Series B Capital Increase 2020 is registered with the commercial register and shall carry all preferential and other rights associated with Series B Shares.
- (c) Each Series B Investors 2020 Share shall be issued for a nominal amount of EUR 1.00 (the "**Issue Amount**" (*Ausgabebetrag*)).
- (d) The articles of association of the Corporation shall be restated in accordance with **Annex 2.1(d)**.

2.2 With regard to the Series B Capital Increase 2020, the Existing Shareholders hereby waive their statutory and contractual subscription rights. The Series B Investors 2020 shall be admitted to subscribe for the Series B Investors 2020 Shares as set out in **Annex 2.1(a)**.

- 2.3 The Corporation shall provide each Series B Investor 2020 with copies of the Resolutions without undue delay (*unverzüglich*).
- 2.4 The Series B Investors 2020 each undertake to the Existing Shareholders, but not to the Corporation which shall not have any claim in its own right to this undertaking (*kein Vertrag zugunsten Dritter*) pursuant to § 328 BGB, without undue delay after the receipt from the Corporation of copies of the Resolutions, (i) to subscribe by written declaration (*Zeichnungsschein*) as attached hereto as **Annex 2.4** for all (and not portions) of their respective Series B Investors 2020 Shares set out in **Annex 2.1(a)** and (ii) to send to the Corporation two (2) originals of their respective signed written declaration (*Zeichnungsschein*).
- 2.5 Within 5 (five) Banking Days after subscribing for the Series B Investors 2020 Shares, each Series B Investor 2020 shall pay the respective Issue Amount for its Series B Investors 2020 Shares in cash by bank transfer free of bank charges to the following account of the Corporation (the **“Corporation Bank Account”**):
- Bank: Deutsche Bank AG, Stuttgart
Account Holder: CureVac AG
IBAN: DE96 6407 0085 0034 6361 00
BIC: DEUTDESS640
- The Corporation shall confirm without undue delay to each Series B Investor 2020 and to the Existing Shareholders in written form (*Textform*) in accordance with § 126b BGB the receipt of each and every Issue Amount payment by the respective Series B Investor 2020.
- 2.6 The Corporation warrants that the Corporation Bank Account is a separate account which does not show a negative balance and will not be debited until the registration of the Series B Capital Increase 2020 with the Corporation’s commercial register.
- 2.7 The Corporation is obliged to submit to the commercial register the application for the registration of the Resolutions together with the application of the execution (*Durchführung*) on the Series B Capital Increase 2020 (including the respective amendments to the Articles reflecting the Series B Capital Increase 2020) without undue delay, but not later than two (2) Banking Days after the complete Issue Amount has been received in accordance with Section 2.5 above. In connection with this, also in circumstances where interim orders (*Zwischenverfügungen*) are issued, without undue delay the Parties shall take all necessary actions and make all necessary statements so that the above Series B Capital Increase 2020 is entered into the commercial register of the Corporation. The Parties undertake (also in the sense of an obligation binding them to exercise their voting rights in a prescribed manner) to take all necessary steps and make all necessary declarations which are required in order to wholly implement all of the provisions in this Section without delay in accordance with its spirit and purpose. The Corporation shall confirm the registration of the Series B Capital Increase 2020, and shall provide a copy of the respective registration notice of the commercial register, without undue delay to the Series B Investors 2020 and to the Existing Shareholders in written form (*Textform*) in accordance with § 126b BGB.

2.8 Upon registration of the Series B Capital Increase 2020 the Shares in the Corporation will be held as follows:

Shareholder	Number of Shares	Series of Shares	Nominal Amount (in EUR)
dievini Hopp BioTech holding GmbH & Co. KG	585,537	B	585,537
dievini Hopp BioTech holding GmbH & Co. KG	13,926	A	13,926
Dr. Ingmar Hörr	8,400	C	8,400
Dr. Ingmar Hörr	85	A	85
Dr. Florian von der Mülbe	6,100	C	6,100
Dr. Florian von der Mülbe	62	A	62
Dr. Wolfgang Klein	1,919	A	1,919
Prof. Dr. Friedrich von Bohlen und Halbach	1,818	A	1,818
Dr. Hans Christoph Tanner	1,414	A	1,414
Prof. Dr. Hans-Georg Rammensee	40	B	40
Prof. Dr. Hans-Georg Rammensee	1,415	A	1,415
Prof. Dr. Günther Jung	50	B	50
Prof. Dr. Günther Jung	2,526	A	2,526
Bill & Melinda Gates Foundation	23,321	B	23,321
Bill & Melinda Gates Foundation	235	A	235
SMI	11,710	B	11,710
Vanguard 1	12,600	B	12,600
Vanguard 2	1,452	B	1,452

Shareholder	Number of Shares	Series of Shares	Nominal Amount (in EUR)
Jupiter	2,927	B	2,927
Jupiter (Series B Investors 2020 Shares)	1,319	B	1,319
Harborside	5,855	B	5,855
Harborside (Series B Investors 2020 Shares)	1,319	B	1,319
Vico	4,684	B	4,684
Vico (Series B Investors 2020 Shares)	3,741	B	3,741
ELMA	2,342	B	2,342
ELMA (Series B Investors 2020 Shares)	7,482	B	7,482
Chartwave	2,342	B	2,342
Chartwave (Series B Investors 2020 Shares)	3,741	B	3,741
Chelt Trading	2,342	B	2,342
Chelt Trading (Series B Investors 2020 Shares)	1,316	B	1,316
L-Bank	5,855	B	5,855
LBBW AM	6,557	B	6,557
LBBW AM (Series B Investors 2020 Shares)	2,992	B	2,992
Lilly	21,078	B	21,078
Genmab A/S	16,345	B	16,345
KfW (Series B Investors 2020 Shares)	224,466	B	224,466

Shareholder	Number of Shares	Series of Shares	Nominal Amount (in EUR)
GSK (Series B Investors 2020 Shares)	112,233	B	112,233
QIA (Series B Investors 2020 Shares)	44,893	B	44,893
FCP (Series B Investors 2020 Shares)	14,964	B	14,964
			1,161,403

The Corporation shall without undue delay, but not later than within two (2) Banking Days after the Series B Capital Increase 2020 has been registered with the commercial register, update the Corporation's share register (*Aktienregister*) duly reflecting the shareholding of the Series B Investors 2020 Shares by the Series B Investors 2020 and shall provide a respective copy of this updated share register to the Series B Investors 2020 and to the Existing Shareholders.

3. CAPITAL RESERVES PAYMENT

- 3.1 In addition to the payment of the Issue Amount for each Series B Investor 2020 Share, the Series B Investors 2020 undertake *vis-à-vis* each other and to the Existing Shareholders, but not to the Corporation, which shall not have any claim in its own right to receive this amount (*kein Vertrag zugunsten Dritter*) pursuant to § 328 BGB, to make an additional payment in the amount of EUR 558,861,343.00 (in words: five hundred fifty eight million eight hundred sixty one thousand three hundred forty three Euros) into the free capital reserve of the Corporation pursuant to § 272 para. 2 no. 4 HGB (the "**Series B Capital Reserves Payments 2020**") as follows:

Series B Investor 2020	Series B Capital Reserves Payment 2020
KfW	EUR 299,774,343.00
GSK	EUR 149,887,171.50
QIA	EUR 59,954,601.50
FCP	EUR 19,984,422.00
Jupiter	EUR 1,761,524.50
Harborside	EUR 1,761,524.50
Vico	EUR 4,996,105.50
ELMA	EUR 9,992,211.00
Chartwave	EUR 4,996,105.50
Chelt Trading	EUR 1,757,518.00
LBBW AM	EUR 3,995,816.00

- 3.2 The Series B Capital Reserves Payments 2020 shall be due for payment to the Corporation Bank Account within fifteen (15) Banking Days after the registration of the Series B Capital Increase 2020 with the Corporation's commercial register and notification thereof by the Corporation to the respective Series B Investor 2020 in written form (*Textform*) in accordance with § 126b BGB as set out in Section 2.7 above. The Corporation shall without undue delay (*unverzüglich*) confirm to each Series B Investor 2020 and to the Existing Shareholders in written form (*Textform*) in accordance with § 126b BGB the receipt of each and every Series B Capital Reserves Payment 2020 by the respective Series B Investors 2020.
- 3.3 Under the condition precedent (*aufschiebende Bedingung*) that a Series B Investor 2020 has not paid its Series B Capital Reserves Payment 2020 in accordance with the provisions set forth in Sections 3.1 and/or 3.2 above (in such case, the "**Breaching Series B Investor 2020**"), such Breaching Series B Investor 2020 hereby declares to transfer and assign its Series B Investors 2020 Shares to a community by undivided shares (*Bruchteilsgemeinschaft*) of the Existing Shareholders in proportion to their respective shareholding in the Corporation for this purpose disregarding the shareholdings of the Breaching Series B Investor 2020 as follows:

Existing Shareholder	Shareholding in the Corporation
dievini Hopp BioTech holding GmbH & Co. KG	80.68%
Dr. Ingmar Hörr	1.14%
Dr. Florian von der Mülbe	0.83%
Dr. Wolfgang Klein	0.26%

Existing Shareholder	Shareholding in the Corporation
Prof. Dr. Friedrich von Bohlen und Halbach	0.24%
Dr. Hans Christoph Tanner	0.19%
Prof. Dr. Hans-Georg Rammensee	0.20%
Prof. Dr. Günther Jung	0.35%
Bill & Melinda Gates Foundation	3.17%
SMI	1.58%
Vanguard 1	1.70%
Vanguard 2	0.20%
Jupiter	0.39%
Harborside	0.79%
Vico	0.62%
ELMA	0.32%
Chartwave	0.32%
Chelt Trading	0.32%
L-Bank	0.79%
LBBW AM	0.88%
Lilly	2.84%
Genmab A/S	2.20%
	<u>~ 100%</u>

(the “Existing Shareholders’ Community”) provided, however, that the shareholdings set forth above for dievini and BMGF, respectively, shall be adjusted to reflect the shareholdings of those two Shareholders if, either prior to or after the occurrence of the above condition, BMGF has received from dievini 1/3 of the dievini Tranche II Series B Shares pursuant to Section 17.5(c) below. Each of the Existing Shareholders hereby declares acceptance of such transfer and assignment. The Breaching Series B Investor 2020 is not entitled to any compensation whatsoever from the Existing Shareholders in case of such transfer and assignment.

3.4 If the Breaching Series B Investor 2020 within ten (10) Banking Days after the condition precedent set forth in Section 3.3 above has been fulfilled

- (a) pays its respective Series B Capital Reserves Payment 2020 to the Corporation Bank Account, the Existing Shareholders are obliged to (re-) transfer and (re-) assign their respective portions in the Existing Shareholders' Community equaling such Series B Investors 2020 Shares to the Breaching Series B Investor 2020 without undue delay.
- (b) does not pay its respective Series B Capital Reserves Payment 2020 to the Corporation Bank Account in its entirety, the Existing Shareholders are obliged to transfer and assign such *pro rata* portions in the Existing Shareholders' Community equaling with such Series B Investors Shares 2020 individually to the non-breaching Series B Investors in relation to the respective non-breaching Series B Investors 2020 shareholdings in the Corporation. If (at all) required, the Existing Shareholders and the non-breaching Series B Investors 2020 agree to consider a surplus settlement (*Spitzenausgleich*) in the course of such transfer.

3.5 Regardless of the transfer and assignment applicable in accordance with Sections 3.3 and/or 3.4 above, the respective Breaching Series B Investor 2020 shall bear any and all reasonable costs, fees and expenses (including, for the avoidance of doubt, all reasonable costs, fees and expenses incurred by each Existing Shareholder) in connection with such (re-) transfers and (re-) assignments of Series B Shares of the Breaching Series B Investor 2020. Any transfer and assignment set forth in Sections 3.3 or 3.4 above is deemed a Permitted Transfer in accordance with Section 17.1 below.

4. LEGAL TITLE WARRANTIES

By means of independent guarantees which apply regardless of fault (*selbständige und verschuldensunabhängige Garantiever sprechen*) pursuant to § 311 para. 1 BGB and exclusively regarding the Shares each of them holds before the Series B Capital Increase 2020, the Existing Shareholders (the "**Title Guarantors**"), and (i) for Section 4.2 the Parties 1 and 5 only, and (ii) for Section 4.6, dievini only, each warrant *vis-à-vis* each of the Series B Investors 2020 that the statements set forth in Sections 4.1 to 4.6 below are correct at the time of the signing of this Agreement and of the time of the registration of the Series B Capital Increase 2020 with the commercial register of the Corporation. The Parties are in agreement that the warranties in this Section 4 do not constitute warranties as to the quality of the object (*Beschaffenheit der Sache*) within the meaning of §§ 443 and 444 BGB and that the provisions set forth in § 442 BGB and § 377 HGB shall not apply, neither directly nor by analogy.

4.1 The statements in Preamble (E), Sections 1.1, 1.4 and 1.5 in relation to the Corporation and the Existing Shareholders' shareholdings are true, complete and correct. The respective Shares have been validly issued to the respective Existing Shareholder; the respective original capital contributions (*Grundkapitaleinlagen*) have been paid up in full by and have not been returned – neither directly nor indirectly – to the respective Existing Shareholder. The respective Existing Shareholder does not have any liabilities in respect of repayments of capital.

- 4.2 The statements in Section 1.2 in relation to CureVac B.V. are true, complete and correct. The respective shares have been validly issued to Dr. Franz-Werner Haas; the respective original capital contributions (Grundkapitaleinlagen) have been paid up in full by and have not been returned – neither directly nor indirectly – to Dr. Franz- Werner Haas. Dr. Franz-Werner Haas does not have any liabilities in respect of repayments of capital.
- 4.3 With regard to their respective Shares, each relevant Existing Shareholder has full power and authority to enter into and perform this Agreement and this Agreement constitutes valid and binding obligations of the respective Existing Shareholder in accordance with the terms herein.
- 4.4 Except for the shares held by Dr. Ingmar Hoerr pledged to Privatbank Berlin the respective Existing Shareholder is the sole and unrestricted owner of the Shares set forth in the row with his name in Section 1.5 above. Except for the shares held by Dr. Ingmar Hoerr pledged to Privatbank Berlin the respective Shares held by such Existing Shareholder are free of rights of third parties of whatever kind (in particular rights of lien, pledge or other Encumbrance, trusteeships, sub-participations, silent partners' holdings, rights of first refusal, purchase rights, options, earn-outs etc.), and no rights exist to the granting of such rights or to the transfer of shares in the Corporation, however, always subject to the provisions set forth in this Agreement. Except as disclosed in this Agreement there are no obligations with regard to the Shares and no option agreements in relation to the acquisition of Shares.
- 4.5 Except for the shares held by Dr. Ingmar Hoerr pledged to Privatbank Berlin and except as disclosed in this Agreement each Existing Shareholder is not, nor has he/it committed to become, a party to any agreement binding him/it for the time after conclusion of this Agreement in any way to dispose of or encumber his/its respective Shares in the Corporation in any circumstance, or exercise the rights arising from such Shares in any way, except to another Shareholder or as provided for in the Articles and in this Agreement.
- 4.6 No tax-detrimental direct or indirect changes of ownership in the Shares of the Corporation or its subsidiaries with respect to Shares held by dievini have occurred until the date hereof.

5. BUSINESS WARRANTIES

- 5.1 By means of independent guarantees which apply regardless of fault (*selbständige und verschuldensunabhängige Garantieverprechen*) pursuant to § 311 para. 1 BGB, the Managing Shareholder hereby warrants *vis-à-vis* each Series B Investor 2020 that the following statements are true, complete and correct at the time of the signing of this Agreement and - except as provided below and subject to changes in the ordinary course of business - of the time of the registration of the Series B Capital Increase 2020 with the commercial register of the Corporation. The Parties are in agreement that the warranties in this Section 5 do not constitute warranties as to the quality of the object (*Beschaffenheit der Sache*) within the meaning of §§ 443 and 444 BGB and that the provisions set forth in § 442 BGB and § 377 HGB shall not apply, neither directly nor by analogy.

5.2 Corporate status

- (a) The Corporation is a stock corporation (*Aktiengesellschaft, AG*), lawfully established pursuant to the statutory law of the Federal Republic of Germany and exists in accordance with applicable law. The current excerpt of the Corporation's commercial register with the local court of Stuttgart for registration number HRB 754041 dated 15 July 2020 reflects fully and accurately all of the Corporation's corporate details, which require registration, and no corporate measures requiring registration have been taken or occurred, which are not duly reflected therein.
- (b) Aside from 100% of the share capital in (i) CureVac Inc., a Subsidiary to the Corporation, incorporated under the laws of Delaware/USA and having its registered offices in Boston (Massachusetts/USA) and (ii) CureVac Real Estate GmbH, a Subsidiary to the Corporation, incorporated under the laws of Germany, having its registered offices in Tübingen (Germany) and registered with the commercial register at the local court in Stuttgart under HRB 757523, the Corporation does not hold, neither directly nor indirectly, (or through an escrow agent (*Treuhänder*)) any shares, partnership interests, memberships or equity interests (including silent partnerships and sub-participations) in other companies or enterprises, and it is not obligated to acquire such shares, partnership interests, memberships or equity interests. The agreements of the Corporation with its subsidiaries have been entered into and carried out at arm's length. The split-off (*Ausgliederung*) into CureVac Real Estate GmbH has, to the Knowledge of the Managing Shareholder, been effected as set out in the corresponding binding tax ruling. To the Knowledge of the Managing Shareholder, insofar all relevant filing and holding terms (*Melde- und Haltefristen*) have been observed.
- (c) The financing of the Corporation on the basis of this Agreement does not trigger any payment obligations of the Corporation which are not provided for in this Agreement.
- (d) With the exception of the VESOP (as defined below), potential future stock option programs and the rights defined in Section 5.2(e), there are no silent partnerships, loans with profit participation or other types of participations in the results of the Corporation, in particular there are also no agreements between the Corporation on the one hand and (i) to the extent not disclosed in **Annex 5.2(d)**, present and/or former employees or (ii) the Existing Shareholders or (iii) persons/companies closely associated with Existing Shareholders on the other hand regarding participation in turn-over or profits or liquidation proceeds, or earn-out agreements.

- (e) With the exception of (i) existing option rights of Dr. Ingmar Hoerr and Dr. Florian von der Mülbe vis-à-vis the Corporation under option agreement dated 25 July 2012 (public deed of the notary Marius Meier in Basel, Switzerland), option agreement dated 17 February 2009 (deed-roll no. Notariat IX Mannheim 312/2009 of the notary director Dr. Rainer Preusche), as well as of the former managing director Dr. Wolfgang Klein vis-à-vis the Corporation under option agreement dated 17 February 2009 (deed-roll no. Notariat IX Mannheim 312/2009 of the notary director Dr. Rainer Preusche) and option agreement dated 25 July 2012 (public deed of the notary Marius Meier in Basel, Switzerland, not numbered) to acquire Shares in the Corporation in the nominal amount of altogether EUR 5,282.00 for a purchase price of EUR 1.00 per Share, and (ii) the convertible loan with Mr. Dietmar Hopp dated 24 October 2019 and the amendment agreement on the convertible loan with Dietmar Hopp dated 25 June 2020 disclosed in **Annex 5.2.(e)** no convertible bonds, option rights or similar rights exist which impose an obligation on the Corporation to issue new shares, transfer existing Shares or to grant voting rights to any third party.
- (f) The Corporation is not a party to any enterprise agreement (*Unternehmensverträge*) within the meaning of §§ 291, 292 AktG.
- (g) Except for the agreements listed in **Annex 5.2(g)**, the Corporation is not a party to a joint venture agreement, where it is under any obligation to make equity related co-funding or equity contribution payments or otherwise relating to a partnership or form of equity participation.
- (h) Except for the current service contract with the Managing Shareholder, the advisory agreement between the Party under no. 4 and the Corporation dated June 20, 2018, the advisory service agreement between the Corporation, Universitätsklinikum Tübingen and Prof. Dr. Georg Rammensee dated 15 February 2008 and the Global Access Agreement between the Corporation and BMGF effective 13 February 2015, the Definitive Agreement (#3) and Project Collaboration Plan for Nanoparticle Strategies for Next Generation Vaccine candidates for RSV/hMPV effective 18 March 2015, the Framework Agreement between BMGF and CureVac effective 11 December 2013, the Definitive Agreement and Project Collaboration Plan for Assessment of RNA Vaccine Technology for Non-live Rotavirus Vaccines in Pre-clinical Models effective 15 May 2014, the Definitive Agreement (#2) and Project Collaboration Plan for Testing the Nearest Neighbor Approach to active Vaccination for HIV-1 bNAbs effective 1 April 2014, the Grant Agreement (Investment ID OPP1160582) for Messenger RNA vaccine candidates for diseases with a disproportionate negative impact on smallholder farmers and their families effective 17 November 2016, the Grant Agreement (Investment ID OPP1179263) for Malaria vaccine candidates based on novel antigen-encoding mRNA effective 27 November 2017 and the Grant Agreement (Investment ID OPP1181063) for Universal Influenza vaccine based on novel antigen-encoding mRNA effective 27 November 2017, the Collaboration and License Agreement between the Corporation and Genmab B.V. effective 19 December 2019 as well as the Termination Agreement between the Corporation and Eli Lilly effective 26 June 2020 by which (i) the License and Collaboration Agreement between the Corporation and Eli Lilly, effective 13 October 2017, (ii) the Early Clinical Phase Supply Agreement between the Corporation and Eli Lilly effective 5 July 2018 and (iii) the Quality Agreement between the Corporation and Eli Lilly, effective 29 June 2018 have been terminated, there are no further contracts or legal transactions between the Corporation on the one hand and an Existing Shareholder, a relative of an Existing Shareholder within the meaning of § 138 par. 1 German Insolvency Act (*Insolvenzordnung – “InsO”*) (“**Relative**”) or an Affiliate of an Existing Shareholder on the other hand except material transfer agreements (i.e. agreements dealing with the supply of substances and physical materials) and confidentiality agreements that have, respectively, been each concluded in the ordinary course of business and at arm’s length.

5.3 Financial Statements, Contracts

- (a) The annual financial statements as per 31 December 2019 (the “**Financial Statements**”) have been formally approved by the Corporation’s supervisory board (*Aufsichtsrat*) and were prepared in accordance with the applicable accounting rules and, in particular, the generally accepted principles of accounting (*Grundsätze ordnungsmäßiger Buchführung - GOB*) consistent with past practice regarding their formal organization and measurement (*unter Wahrung formeller unter materieller Bilanzkontinuität*). Specifically, all accounting and valuation principles, methods and rules were retained and all options to capitalize or to include items on the liabilities side (*Aktivierungs- und Passivierungswahlrechte*) were consistently applied.
- (b) The Financial Statements present a true and fair view of the liabilities, net assets (*Vermögenslage*), financial condition (*Finanzlage*) and results of operation (*Ertragslage*) of the Corporation.
- (c) With the exception of retentions of title and security rights customary in the ordinary course of business, the Corporation is entitled to the full and unencumbered ownership of its current economic assets, free of all third party rights, in particular security rights, rights of lien, encumbrances, restrictions on alienation and restrictions on the ownership position.
- (d) Except as listed in or attached as **Annex 5.3(d)**, the Corporation and its Affiliates do not own any real estate and the use of the property rented by the Corporation does not infringe any applicable legal provisions.
- (e) Apart from usual wear and tear, the Corporation’s items of property are serviceable for their respective current period of use.

- (f) All Material Contracts of the Corporation are listed in or attached as **Annex 5.3(f)**. “Material Contracts” are (i) those contracts relating to the financing of the Corporation with equity capital or loan capital and (ii) contracts existing on the date hereof which establish current or future obligations of the Corporation of more than EUR 1,500,000.00 in value with the exception of general indemnifications (*allgemeine Ersatzpflichten*) agreed upon in licensing or service agreements in the ordinary course of business. To the Knowledge of the Managing Shareholder, as of the day hereof, (i) there are no reasons in the sphere of the Corporation preventing the Corporation from fulfilling its obligations under the Development and Option Agreement with Acuitas Therapeutics Inc. (“Acuitas”) or the Framework Agreement with CEPI, and (ii) there are no facts in the sphere of the Corporation or information from the contractual partners indicating a premature termination of the respective agreement by Acuitas or CEPI.
- (g) Since the balance sheet date of the Financial Statements, the Corporation and its business have been managed with the care of a diligent businessman (*Sorgfalt eines ordentlichen Geschäftsmannes*) and in all material respects in the same manner as prior to the balance sheet date of the Financial Statements. To the Knowledge of the Managing Shareholder, since the balance sheet date of the Financial Statements no business transaction outside the ordinary course of business and no Material Adverse Change has occurred.
- (h) To the Knowledge of the Managing Shareholder there was and as at the time of the signing of this Agreement there is no Charitability Default. The Corporation has not been informed that a Charitability Default has occurred nor that it has not complied with and fulfilled all of its other obligations under and in connection with the Global Access Commitments (incl. the Global Access Agreement). To the Knowledge of the Managing Shareholder there are no specific facts and circumstances based on which a Charitability Default is likely to occur. The Corporation has undertaken and still undertakes its best efforts to prevent the occurrence of a Charitability Default.

5.4 Litigation

To the Knowledge of the Managing Shareholder and except as set forth in **Annex 5.4** as of the date of this Agreement the Corporation is not a party to court proceedings, where a notification of such court proceedings has been received by the Corporation, including such pending in front of an administrative court, and proceedings have neither been threatened nor are - to the Knowledge of the Managing Shareholder - to be expected on the basis of specific circumstances.

5.5 Solvency

Irrespective of the negative equity reflected in the balance sheet as of 31 December 2019 the Corporation is neither over-indebted (*überschuldet*) nor unable, or threatened to become unable, to pay its debts when due (*zahlungsunfähig*) within the meaning of §§ 16 through 19 *InsO*, and there is no reason or legal obligation to apply for insolvency proceedings in accordance with the provisions set out in the *InsO*.

5.6 Compliance

To the Knowledge of the Managing Shareholder, in the past the business operations of the Corporation have been conducted in accordance with the authorizations and permissions granted to it as well as complying with applicable statutory law and are currently so conducted at the date of this Agreement.

5.7 Intellectual Property

- (a) Annex 5.7(a) contains a true, complete and accurate list of the Registered Corporation-Owned IPR and any related disclosures. **“Registered Corporation-Owned IPR”** means registered patents, registered utility models, registered trademarks and service marks, registered designs, domain names (including any application for any of the same) owned by the Corporation anywhere in the world. **“Corporation-Owned IPR”** means (i) the Registered Corporation-Owned IPR and (ii) all other (non-registered) intellectual property rights of any kind which are used by the Corporation under and in connection with its Object of Business (in particular copyrights and Know-How). **“Know-How”** means, know how, formulas, recipes, trade secrets, technical data, production, testing and quality control of the past and present products and technology of the Corporation.
- (b) To the actual Knowledge of the Managing Shareholder, the Corporation owns and has a legal and valid right to use all Corporation-Owned IPR. Annex 5.7(b) contains a list of all commercial license agreements under which the Corporation has granted commercial rights to third parties to use Corporation-Owned IPR. All such agreements are in force, valid and at arm’s length, unless otherwise provided for in the Annex 5.7(b). No Corporation-Owned IPR is held by any Shareholders, their respective Affiliates or members of the Supervisory Board or the Management Board of the Corporation.
- (c) To the Knowledge of the Managing Shareholder, all material Know-How necessary for the Corporation’s business as it is currently conducted has been reasonably documented (either physically or digitally) in such way that the Corporation still has or will have access to such Know-How even if the original knowledge bearer of the relevant Know-How permanently has left or will leave the Corporation.

- (d) To the Knowledge of the Managing Shareholder, except for the action listed in **Annex 5.7(d)** no action is pending in any court or national or international patent, trademark or other intellectual property office challenging the validity, enforceability or the Corporation's ownership of any Corporation-Owned IPR. To the Knowledge of the Managing Shareholder all maintenance, renewal and other official fees due in respect of the Registered Corporation-Owned IPR have been paid and other mandatory formalities have been complied with to avoid expiration. The Corporation-Owned IPR are free and clear of all liens and of any royalty or commission rights of third parties. To the Knowledge of the Managing Shareholder, there are no claims pending or threatened in writing that a third party has infringed any Corporation-Owned IPR.
- (e) To the Knowledge of the Managing Shareholder, there are no claims pending with regard to any Licensed-In IPR nor are – to the Knowledge of the Managing Shareholder – claims threatened in writing with regard to any Licensed-In IPR. To the actual Knowledge of the Managing Shareholder the Licensed-In IPR necessary for the conduct of the Corporation's business as it is currently conducted are validly licensed. **Annex 5.7(e)** contains a complete and accurate list of all license agreements under which the Corporation is licensed to use Licensed-In IPR.
- (f) To the Knowledge of the Managing Shareholder, (i) the Corporation-Owned IPR and the Licensed-In IPR are sufficient and adequate and freely available for the Corporation to perform after the date of this Agreement in the same way that it did before that date and (ii), as per the date of this Agreement, the Corporation is in a position to expand its Corporation-Owned IPR in a manner required to pursue its Object of Business after the date of this Agreement.
- (g) All inventions of current and former employees, members of the Management Board or of the Supervisory Board of the Corporation which were made in the course of and in relation to their employment with, or service for, the Corporation were assumed by the Corporation (in particular, in accordance with the German Law on Employee Inventions (*Arbeitnehmererfindungsgesetz*)) in such a way that the employee or the member of the Management Board or of the Supervisory Board, as the case may be, can neither exploit nor prevent the Corporation from exploiting or enjoying the use of such invention.
- (h) The hardware, software, communication systems, networks and other information technology used by the Corporation (the "**IT Systems**") are owned by the Corporation or are licensed, leased or supplied under customary and valid third party contracts (the "**Third Party IT Contracts**"). To the Knowledge of the Managing Shareholder, neither the Corporation nor any other parties to the Third Party IT Contracts are in material default of the terms of any of the Third Party IT Contracts and there are no existing disputes under any such Third Party IT Contracts. During the twelve (12) months before the date of this Agreement the IT Systems were not subject to any failure and/or data loss with negative effects on the business of the Corporation nor are there any defects which could lead to such failure or data loss. The Corporation has not received any written notice alleging that it has failed to comply with any applicable data protection laws in relation to the operation of the business of the Corporation.

5.8 Tax

To the Knowledge of the Managing Shareholder, (i) all tax and other returns and reports required to be filed by or on behalf of the Corporation and its Subsidiaries have been filed with the appropriate authorities in all jurisdictions in which such tax and other reports and returns are required to be filed, and (ii) all such tax and other returns and reports were, at the time of such filing, in material compliance with all laws and rules applicable thereto. To the Knowledge of the Managing Shareholder, all taxes that have become due and payable by the Corporation and its Subsidiaries have been fully and timely paid or fully provided for.

6. LEGAL CONSEQUENCES OF BREACH OF WARRANTY

6.1 If and to the extent that

- (i) one of the legal title warranties given pursuant to Section 4 above proves to be incorrect, not fulfilled or not complied with, by means of restitution in kind (*Naturalrestitution*), the Title Guarantor who has breached the legal warranty shall, and / or
- (ii) one of the business warranties given pursuant to Section 5 above proves to be incorrect, incomplete, not fulfilled or not complied with, by means of restitution in kind (*Naturalrestitution*), the Managing Shareholder shall,

put each of the Series B Investors 2020 in the position they would have been in if the respective warranty had been properly fulfilled or complied with or had been correct by creating the conditions corresponding to the warranty. If restitution in kind is not possible or does not take place within two (2) weeks after receipt of the corresponding written request from any of the Series B Investors 2020, each of the Series B Investors 2020 may instead demand monetary damages pursuant to §§ 249 et seq. BGB to be payable to the respective Series B Investor 2020 or, at their choice, to the Corporation in such amount as is necessary to reinstate the Series B Investors 2020 or the Corporation in such position as they would have been in had the respective warranty been (i) properly fulfilled or complied with or (ii) correct. Neither the Title Guarantors nor the Managing Shareholder shall be liable, and the Series B Investors 2020 shall not be entitled to bring any claims under or in connection with this Section 6, to the extent that the facts giving rise to the respective claim (*anspruchsbegründende Tatsachen*) of the respective warranty that has been breached have been truly and fairly and in a reasonably specific manner disclosed in the Corporation's data room dedicated to the Series B Investors 2020 as of 15 July 2020, midnight (CET).

6.2 Liability Cap

- (a) The liability of the Title Guarantors is, in the case of BMGF, limited to the lesser of (i) the BMGF Funds (as defined below in Section 8 below) or (ii) to the aggregate amount of the Series B Investors 2020 investment (Issue Amount multiplied with the number of Series B Investors 2020 Shares plus Series B Capital Reserves Payment 2020), and in the case of the other Title Guarantors limited to the lesser of (i) the sum of the respective Existing Shareholders investment (i.e., issue amount and capital reserves payments as set forth in the respective investment and shareholders' agreement) or (ii) to the amount of the aggregate Series B Investors 2020 investment (Issue Amount multiplied with the number of Series B Investors 2020 Shares plus Series B Capital Reserves Payment 2020) (the "**Liability Cap**").
- (b) The Managing Shareholder's liability to (as the case may be) the Series B Investors 2015, the Series B Investors 2016, the Series B Investor 2017, the Series B Investor 2019 and the Series B Investors 2020 for any and all breaches of business warranties set out in the investment and shareholders' agreement dated 2 October 2015, the investment and shareholders' agreement dated 14 October 2016, the investment and shareholders' agreement dated 13 October 2017, the investment and shareholders' agreement dated 18 December 2019 as well as pursuant to Section 5 of this Agreement is limited to a maximum liability sum (*Haftungshöchstgrenze*) of EUR 250,000.00 (in words: two hundred fifty thousand Euros) in aggregate. As per the date of this Agreement, neither a Series B Investor 2015 nor a Series B Investor 2016, nor the Series B Investor 2017 or the Series B Investor 2019 has raised any claims vis-à-vis the Managing Shareholder as a consequence of a (potential) breach of business warranties under the investment and shareholders' agreement dated 2 October 2015, the investment and shareholders' agreement dated 14 October 2016, the investment and shareholders' agreement dated 13 October 2017 and/or the investment and shareholders' agreement dated 18 December 2019.
- (c) The Liability Cap and the limitation of liability set forth in Section 6.2(b) shall not apply in cases of fraudulent misrepresentation and gross negligence.
- 6.3 Claims arising from a breach of the warranties given in this Agreement may only be enforced against the relevant guarantor if the total damage resulting from such specific breach exceeds a threshold (*Freigrenze*) of EUR 100,000.00 (in words: one hundred thousand Euros), but if it does exceed that figure, then it may be enforced in the full amount and not simply the excess above EUR 100,000.00 (in words: one hundred thousand Euros).

6.4 Claims arising from the warranties pursuant to Sections 4 and 5 above shall become time-barred within twenty-four (24) months after registration of the Series B Capital Increase 2020 in the commercial register of the Corporation.

7. UNDERTAKINGS

7.1 Any Shareholder shall be entitled to receive any information which has been provided by the Corporation or CureVac NL to any of the other Shareholders, and the Corporation or CureVac NL shall provide any such information automatically to the respective other Shareholders at the same time.

7.2 The Corporation and CureVac NL shall reasonably cooperate with any Shareholder to provide such Shareholder with such information as requested by such Shareholder as permitted by law and applicable stock exchange rules to complete such Shareholder's audit of its holdings in the Corporation or CureVac NL within one hundred and twenty (120) days after the end of each fiscal year.

7.3 No later than sixty (60) days following the end of each taxable year of the Corporation, the Corporation shall provide details of the Corporation's capitalization and shareholders as of the end of the last day of such taxable year to each of the Mutual Fund Investors. In addition, the Corporation shall provide each of the Mutual Fund Investors with access to such other Corporation information as may be necessary (i) for each of the Mutual Fund Investors to determine the status of the Corporation or any of the Corporation's Affiliates as a "controlled foreign corporation" ("CFC") as defined in the U.S. Internal Revenue Code of 1986, as amended (or any successor thereto) (the "Code") and (ii) to determine whether each of the Mutual Fund Investors or their respective Affiliates is required to report its *pro rata* portion of the Corporation's Subpart F Income on its United States federal income tax return, or to allow each of the Mutual Fund Investors or their respective Affiliates to otherwise comply with applicable United States federal income tax laws. The Corporation and the Existing Shareholders shall not, without the written consent of each of the Mutual Fund Investors issue or transfer stock in the Corporation to any investor if, following such issuance or transfer the Corporation, in the determination of counsel or accountants for any of the Mutual Fund Investors, (such opinion also to be addressed to the Corporation), would be a CFC. For the purposes of this Section 7.3, the term "Affiliates", with respect to any Mutual Fund Investor, shall include but not be limited to any person that receives, whether directly or indirectly, investment management or investment advisory services from such Mutual Fund Investor, or any of such party's respective Affiliates.

- 7.4 In connection with a “**Qualified Electing Fund**” election made by any of the Mutual Fund Investors, (being, for the purposes of this Section 7.4, the “**PFIC Investors**” and “PFIC” a “passive foreign investment company” within the meaning of Section 1297 of the Code) pursuant to Section 1295 of the Code or a “**Protective Statement**” filed by any of the PFIC Investors pursuant to U.S. Treasury Regulation Section 1.1295-3, as amended (or any successor thereto), with respect to the Corporation or any Subsidiary, the Corporation shall provide annual financial information regarding the Corporation and any such Subsidiary to each of the PFIC Investors in the form attached as **Schedule 1** (which shall be signed by an officer of the Corporation or such Subsidiary, as applicable) as soon as reasonably practicable following the end of each taxable year of any of the PFIC Investors (but in no event later than ninety (90) days following the end of each such taxable year), and shall provide each of the PFIC Investors with such other information regarding the Corporation and any Subsidiary as may be required for purposes of filing U.S. federal income tax returns in connection with such “Qualified Electing Fund” election or “Protective Statement”; provided that the reasonable expenses incurred by the Corporation in connection with the foregoing information obligations shall be borne by each of the PFIC Investors *pro rata* based on the relative ownership of such Parties. Each of the PFIC Investors, or their respective direct or indirect beneficial owners, as applicable, who has made a “Qualified Electing Fund” election must include in its gross income for a particular taxable year its *pro rata* share of the Corporation’s earnings and profits pursuant to Section 1293 of the United States Internal Code of 1986, as amended (or any successor thereto). To the extent in compliance with German stock corporation law, and further provided that the provisions in Section 10.5 and 16 of this Agreement shall prevail, the Corporation agrees to declare and pay a dividend distribution to such of the PFIC Investors (no later than sixty (60) days following the end of such PFIC Investor’s taxable year or, if later, sixty (60) days after the Corporation is informed by such Party, that such Party or its Affiliate has been required to recognize such an income inclusion) in an amount equal to 50% (fifty percent) of the amount that would be so included by such PFIC Investor, if such PFIC Investor were a “United States person” as such term is defined in Section 7701(a)(30) of the U.S. Internal Revenue Code and had such PFIC Investor made a valid and timely “Qualified Electing Fund” election that was applicable to such taxable year. In the event any dividend is paid pursuant to this Section 7.4, a like dividend shall be paid to all other Shareholders.
- 7.5 Notwithstanding any statutory or contractual information rights set forth herein, the Corporation shall furnish to the Mutual Fund Investors such other information as is reasonably requested:
- (a) by such Mutual Fund Investor to value the Corporation’s securities for purposes of such Mutual Fund Investor’s valuation, disclosure or reporting obligations under Applicable Fund Law;
 - (b) to value the Corporation’s securities for purposes of such Mutual Fund Investor’s valuation, disclosure or reporting obligations (if any) under the Investment Company Act (as amended) and regulations promulgated thereunder.

For the avoidance of doubt, and in addition to any information rights that a Mutual Fund Investor may have pursuant to the terms of this agreement (including but not limited to those rights set out in Sections 7.1 and 7.2 above), the Corporation agrees to provide to a Mutual Fund Investor the information set out in Sections 15.1(a), 15.1(b) and 15.1(c) below (in each case on the same timetable as set out in the applicable Section).

- 7.6 In the event that any of the Corporation's Affiliates is determined by counsel or accountants for each of the Mutual Fund Investors to be subject to the reporting requirements of either or both of Sections 6038 and 6038B of the Code, the Corporation agrees, upon a request from such Party, to provide such information to such Party as may be necessary to fulfill such Party's obligations thereunder.

The Corporation shall not, and the Corporation shall to the extent legally practicable cause any Affiliate under its control and shall use its best efforts to cause each of their respective directors, officers, board (supervisory and management) members, employees, independent contractors, representatives or agents not to, make, directly or indirectly, any payment or promise to pay, or gift or promise to give or authorize such a promise or gift, of any money or anything of value, directly or indirectly, to: (a) any "foreign official" (as such term is defined in the United States Foreign Corrupt Practices Act (the "FCPA")) for the purpose of influencing any official act or decision of such official or inducing him or her to use his or her influence to affect any act or decision of a governmental authority; or (b) any "foreign political party" or official thereof or "candidate for foreign political office" (as defined in the FCPA) for the purpose of influencing any official act or decision of such party, official or candidate or inducing such party, official or candidate to use his, her or its influence to affect any act or decision of a foreign governmental authority, in the case of both (a) and (b) above in order to assist the Corporation or any of its Affiliates to obtain or retain business for, or direct business to the Corporation or any of its Affiliates, as applicable. The Corporation shall to the extent legally practicable ensure that none of its Affiliates under its control and shall use its best efforts to ensure that none of their respective directors, officers, board (supervisory and management) members, employees, independent contractors, representatives or agents shall make any bribe, rebate, payoff, influence payment, kickback or other unlawful payment of funds or received or retained any funds in violation of any law, rule or regulation. The Corporation further represents that it shall, and shall to the extent legally practicable cause each of its Affiliates under its control to, maintain systems of internal controls (including, but not limited to, accounting systems, purchasing systems and billing systems) to ensure compliance with the FCPA or any other applicable anti-bribery or anti-corruption law.

- 7.7 Without limitation to any statutory information rights and any other information rights granted under this Agreement, the Corporation and CureVac NL, as the case may be, shall provide to KfW to the extent not prohibited by any mandatory law and applicable stock exchange rules (a) the information set out in Sections 15.1(a), 15.1(b) and 15.1(c) below (in each case on the same timetable as set out in the applicable Section) and (b) the information reasonably requested by KfW for the management and controlling of KfW's shareholding in the Corporation or CureVac NL in order for KfW or any other of the institutions listed in the following sentence to comply with their respective obligations. In addition, the member of the Supervisory Board designated (*nominiert*) by KfW shall, to the extent not prohibited by any mandatory law and applicable stock exchange rules, be entitled to pass on, and discuss any information received in his or her capacity as a member of the Supervisory Board with (i) KfW, (ii) the federal ministry responsible for the supervision of the participation (currently the Federal Ministry for Economy and Energy (*Bundesministerium für Wirtschaft und Energie*)), (iii) the German Federal Ministry of Finances (*Bundesministerium der Finanzen*) and the (iv) Federal Audit Office (*Bundesrechnungshof*), in order for each of the foregoing to comply with their respective obligations mandatory by law or statute. The right of passing on and discussing information shall not apply to confidential information and business, operational and other secrets of the Corporation (or CureVac NL, as the case may be), if and to the extent such information is not necessarily required by any person listed in (i) to (iv) for compliance as further described in the previous sentence. Section 30.1, in particular the exemptions in Section 30.1 second sentence, shall apply accordingly. Within the scope of mandatory law or statute governing the Federal Audit Office and applicable stock exchange rules, the Federal Audit Office shall have its own audit right and the Corporation and CureVac NL shall enable the Federal Audit Office to carry out such audit and fully cooperate with the Federal Audit Office.

- 7.8 Without limitation to any statutory information rights and in addition to any information rights that GSK and/or BMGF may have pursuant to the terms of this Agreement, the Corporation and CureVac NL, as the case may be, shall provide to GSK and to BMGF at their request and to the extent not prohibited by any mandatory law and applicable stock exchange rules, the information set out in Sections 15.1(a),15.1(b) and 15.1(c) below (in each case on the same timetable as set out in the applicable Section).
- 7.9 The Corporation and CureVac NL shall reasonably cooperate with each Shareholder to provide each such Shareholder in a timely manner with such information (including *ad hoc* information on the qualified Corporation's financing and qualified M&A opportunities or information which is mandatory for tax purposes) as permitted by mandatory law and applicable stock exchange rules and required by the respective Investor to comply with its (or its Affiliates) statutory and regulatory obligations (including financial accounting requirements) or to fulfil information requests made by governmental authorities. Section 7.5 Sentence 2 shall apply to each Series B Investor 2016, the Series B Investor 2017, the Series B Investor 2019 and each Series B Investor 2020 accordingly.
- 7.10 Withholding tax on dividends (including constructive/deemed and other dividends) and on interest under and in connection with arrangements or contracts (such as sale and purchase agreements, swap agreements, loan agreements, rental agreements) entered into or existing before and until the consummation of the IPO or in connection with their implementation, amendment, unwinding or termination whether or not these occur before or after the IPO (i) which is paid by the Corporation or CureVac NL and (ii) which was not properly withheld by the Corporation or CureVac NL and (iii) which is creditable (*anrechenbar*) by, or reimbursable to, the Existing Shareholders or their respective Affiliates or related persons, shall be procured by the relevant Existing Shareholder to be reimbursed to the Corporation or CureVac NL (whichever paid the withholding tax) immediately after the respective Existing Shareholder, its Affiliate or related person has received the credit or reimbursement. Each Existing Shareholder has to use best efforts in order for the respective Existing Shareholder, its Affiliates or related persons, as the case may be, to obtain a credit or reimbursement. Related persons in the aforementioned sense are at least all direct or (calculated by multiplication of the respective shareholding quotas at each shareholding level) indirect shareholders of the Corporation holding at least 15 per cent of the direct and/or indirect shareholding.

For the purpose of this Section 7.10, BMGF's compliance as an Existing Shareholder shall be voluntary.

III. USE OF FUNDS, COOPERATION BETWEEN CORPORATION AND BMGF

8. USE OF FUNDS

The Parties agree that the Corporation shall use the proceeds from

- (a) BMGF's payment into the Corporation's capital reserves related to the BMGF Tranche I Series B Shares as well as an amount of USD 12,000,000.00 (in words: twelve million US-Dollars) from dievini's payment into the Corporation's capital reserves related to dievini Tranche II Series B Shares (the "**BMGF Funds**") exclusively (i) to finance the new facility to be used *inter alia* to manufacture vaccines and drugs in support of BMGF's Charitable Purpose (as defined in the Global Access Agreement), and/or (ii) for the continued development of the Corporation's Platform Technology and use of the Platform Technology to advance vaccine and drug candidates in support of BMGF's Charitable Purpose;
- (b) Series B Investors 2020 to fund (i) the development of its proprietary pipeline, including earlier stage assets currently in preclinical development, (ii) research and development activities to expand its mRNA platform technology, in particular with respect to a vaccine fighting the COVID-19 pandemic and other infectious diseases and (iii) manufacturing capacities for mRNA-based drug product candidates and products.

9. GLOBAL ACCESS COMMITMENTS

The Parties hereby acknowledge that the Corporation undertakes to support BMGF in its pursuit of its Charitable Purpose. The Parties agree that BMGF and the Corporation have entered into the Global Access Commitments set forth in the Global Access Agreement in the form as attached hereto as **Annex 9** (the “**Global Access Commitments**”) and undertake *vis-à-vis* BMGF to BMGF (also in the sense of an obligation binding them to exercise their voting rights in a prescribed manner, if required) to take all necessary steps and action and make all necessary declarations which are required in order to cause the Corporation to wholly implement the obligations of the Corporation according to the Global Access Agreement. For the avoidance of doubt, this Section 9 does not require the other Shareholders to make any additional capital contributions or other payments or to incur any liability or assume any obligations beyond those in this Section 9.

10. BMGF’S RIGHT OF WITHDRAWAL

10.1 The Corporation and, as the case may be, CureVac NL, is required, to the extent permitted by § 71 AktG and any other statutory provision applicable in this context, at the request of BMGF to either

- (a) acquire all Shares of the Corporation held by BMGF or its Affiliates as of the date of this Agreement including any securities issued as replacement of such Shares through a conversion or exchange or as the result of a dividend, share split, split-up, or other distribution with respect to such Shares (the “**BMGF Shares**” or “**BMGF’s Shares**”) at a purchase price equal to the greater of (x) the Fair Market Value (as defined below) times the number of BMGF Shares, or (y) the aggregate amount of the capital reserves made for the BMGF Shares (whether by BMGF or any other person) and the nominal amount of the BMGF Shares plus 0.5% p.a. interest on such amount from the time of the respective investment until the date of the purchase of the Shares (the “**Minimum Purchase Price**”) and/or
- (b) facilitate the purchase of all Shares held by BMGF or its Affiliates by a third party at a price per Share no less than the Minimum Purchase Price in a transaction that complies with applicable law,

if the Corporation commits a Charitability Default (as defined below) and the Charitability Default is not cured (the “**Uncured Charitability Default**”) within ninety (90) days after the Corporation receives notification of the Charitability Default from BMGF; the period of ninety (90) days shall be extended up to one hundred twenty (120) days if at the end of the period of ninety (90) days the Corporation demonstrates to BMGF that despite the Corporation’s reasonable best efforts to cure the Charitability Default during the initial cure period of ninety (90) days, additional time to cure the Charitability Default is necessary and that such cure is possible within an additional thirty (30) days. The Corporation and, as the case may be, CureVac NL, will use their reasonable and diligent efforts to fulfill its obligations under Section 10.1 as soon as reasonably practicable in the event of an Uncured Charitability Default.

“Charitability Default” means any event in which the Corporation or, as the case may be, CureVac NL:

- (i) commits a material breach of the Global Access Commitments;
 - (ii) uses BMGF funds for purposes other than those set forth in Section 8 of this Agreement or uses BMGF funds in violation of Section 15 of the Global Access Agreement; or
 - (iii) fails to comply with the U.S. tax code-related obligations set forth in Sections 9, 11 and 13 of the Global Access Agreement.
- 10.2 In case of an Uncured Charitability Default and in case the obligation according to Section 10.1 cannot be fulfilled within four (4) months after the Uncured Charitability Default occurred, BMGF shall be entitled to sell and transfer its Shares to any Third Party chosen by BMGF. For the avoidance of doubt, any transfer of BMGF Shares in exercise of the withdrawal right pursuant to this Section 10 shall be a Permitted Transfer as defined in Section 17.1. The limitations set forth in Sections 17 and 18 below shall not apply to such sale and transfer, whereas, however, Section 19 below shall apply.
- 10.3 If the Corporation or, as the case may be, CureVac NL, is unable to redeem all of BMGF’s Shares because it is prohibited from doing so under applicable law, and the Corporation or, as the case may be, CureVac NL, is not able to provide the sales right pursuant to Section 10.1(b), then the Corporation or, as the case may be, CureVac NL, shall acquire as many of BMGF’s Shares as is legally permissible and continuously use its best efforts to effect the withdrawal right, consistent with applicable law, until such time as BMGF and its Affiliates no longer hold any Shares. Upon the transfer of any shares by BMGF to any one or more transferees that are tax-exempt organizations as described in section 501(c)(3) of the Code, BMGF may assign to any such transferee all of its rights attached to such Shares.
- 10.4 After execution of the investment and shareholders’ agreement dated 2 October 2015, the Shareholders (excluding the Series B Investors 2015) held an extraordinary shareholders’ meeting of the Corporation (*Völlversammlung*) waiving all statutory provisions and provisions of the Articles as to holding and convening a shareholders meeting and, in this shareholders’ meeting, have passed an unanimous shareholders’ resolution pursuant to § 71 para. 1 no. 8 AktG authorizing the Corporation for a period of five years to acquire all Shares held by BMGF or its Affiliates pursuant to Section 10.1(a) or as many of BMGF’s Shares as is legally permissible pursuant to Section 10.3 each for the Minimum Purchase Price. For the avoidance of doubt, the Shareholders hereby undertake not to pass any subsequent shareholders’ resolution resulting in a revocation of the authorization of the Corporation to acquire the Shares of BMGF according to Sections 10.1(a) or 10.3. The Shareholders hereby further undertake to pass a resolution renewing the authorization of the Corporation to acquire the Shares of BMGF according to Section 10.1(a) or 10.3 upon request of BMGF any time before or after the expiry of the authorization period. Correspondingly, after the NL Contribution, the Shareholders hereby also undertake *vis-à-vis* BMGF to resolve on and renew the authorization of CureVac NL to acquire BMGF Shares as required and permissible under Dutch corporate law.

- 10.5 During the period when the Corporation or, as the case may be, CureVac NL, is unable to perform its obligation to redeem or find a purchaser of all of BMGF's Shares, the Corporation or, as the case may be, CureVac NL, shall not pay dividends on any of its share capital, redeem the Shares of any other Shareholder of the Corporation or, as the case may be, CureVac NL, (other than repurchases at cost of Shares of the share capital from employees, officers, directors, consultants or other persons performing services for the Corporation or any Affiliate pursuant to agreements under which the Corporation has the option to repurchase such Shares upon the occurrence of the termination of employment or service) or otherwise make any other distribution to any other Shareholder of the Corporation in respect of the share capital held by such Shareholders.
- 10.6 The Corporation or, as the case may be, CureVac NL, shall pay all fees and expenses incident to the performance of or compliance with this Section 10 by the Corporation.
- 10.7 If BMGF's Shares are sold or redeemed due to an Uncured Charitability Default, commencing upon the date of such sale or redemption, BMGF or its Affiliates will have a twelve (12) month look-back right by which, in the event of (i) a Change in Control (as defined below) that results in cash proceeds, or (ii) upon the closing of a firmly underwritten public offering of Shares of the Corporation or, as the case may be, CureVac NL, representing a per share valuation for the Corporation or, as the case may be, CureVac NL, in excess of 200% of the valuation used for the sale or redemption of BMGF's Shares, BMGF will receive compensation equal to the excess of what it would have received in such transaction if it still held the Shares at the time of such Change in Control or public offering over what it actually received in the sale or redemption of the Shares had the Uncured Charitability Default not occurred.
- 10.8 For purposes of this Agreement, "**Change in Control**" means
- (a) the acquisition after the date of this Agreement, directly or indirectly, by any person or group of the beneficial ownership of securities of the Corporation possessing more than 50% of the total combined voting power of all outstanding voting securities of the Corporation;
 - (b) a merger, consolidation or other similar transaction involving the Corporation, except for a transaction in which the Shareholders (or their respective Affiliates) of the outstanding voting securities of the Corporation immediately prior to such merger, consolidation or other transaction hold, in the aggregate, securities possessing more than 50% of the total combined voting power of all outstanding voting securities of the surviving entity immediately after such merger, consolidation or other transaction; or

- (c) the sale, transfer, license or other disposition (in one transaction or a series of related transactions) of all or substantially all of the assets of the Corporation to any person or group.
- 10.9 “**Fair Market Value**” of a Share means (i) if the Shares are Freely Tradable (as defined below), the closing price of a Share on the primary securities exchange on which the Shares trade on the most recent day such exchange was open for trading prior to the closing date of the purchase under this Section 10 and (ii) if the Shares are not Freely Tradable, the then current fair market value per share of the Shares as determined by an auditor mutually agreed upon by the Corporation or, as the case may be, CureVac NL, and BMGF (which agreement will not be unreasonably withheld) as an independent appraiser (*Sachverständiger*) with binding effect on the Parties. The appraiser shall value the Shares in accordance with the acknowledged valuation principles for company appraisals set forth by the *Institut der Wirtschaftsprüfer e. V.* in Düsseldorf (IDW-S1) and is required to record the results of his/her examination in a written report unless the Parties waive this requirement. If the Corporation or, as the case may be, CureVac NL, and BMGF cannot agree on the person of the appraiser within 10 Banking Days upon the written proposal of one of the Parties to the other, then the appraiser shall be appointed by the Chamber of Auditors at the request of one party. “**Freely Tradable**” means that the Shares are listed on a Recognized Stock Exchange and are not subject to restrictions from trading under applicable laws or the rules of such Recognized Stock Exchange and the Corporation is current in its filings with applicable securities regulatory agencies.
- 10.10 For the avoidance of doubt it is understood by the Parties that the validity of the Global Access Agreement and any project agreed on in connection with the Global Access Commitments shall continue regardless of a sale of BMGF's Shares pursuant to this Section 10 and BMGF shall continue to be entitled to enforce its rights under the Global Access Agreement and in relation to any agreed projects. Further for the avoidance of doubt, an exercise by BMGF of its rights under this Section 10 will cause BMGF to cease having any further obligations under this Agreement at such time as it no longer holds any Shares, except for the confidentiality obligations pursuant to Section 30, and Section 31.5 shall not apply.
- 10.11 The Corporation or, as the case may be, CureVac NL, will inform the Shareholders holding Series B Shares (the “**Series B Shareholders**”) without undue delay (*unverzüglich*) of (i) any notification of a Charitability Default from BMGF set forth in Section 10.1 above and the measures the Corporation has taken and/or will take to cure such Charitability Default within the time period set forth in Section 10.1 above and (ii) any Uncured Charitability Default set forth in Section 10.1 above.

10.12 For the avoidance of doubt, the Shareholders shall not be liable for any payment BMGF is or could be entitled to receive from the Corporation under this Section 10.

11. ANTI-DILUTION AND DOWNROUND PROTECTION

11.1 In the event that subsequent to the Series B 2020 Capital Increase additional increases of the Corporation's or CureVac NL's registered share capital will be implemented, all Shareholders shall have the right to subscribe to new Shares, as the case may be, resulting from each new capital increase under the same terms and conditions under which the new Shares are issued and to such extent as is necessary to preserve the shareholding of the respective Shareholder in the Corporation or in CureVac NL prior to such new capital increase. If not all Shareholders exercise their respective subscription rights in a new capital increase that would lead to a third party acquiring control over the Corporation or CureVac NL, the Corporation or CureVac NL, will inform the other Shareholders who did exercise their respective subscription rights without undue delay by written notice about the number of Shares for which subscription rights have not been exercised and the respective Shareholders may acquire the remaining new Shares within ten (10) Banking Days after receipt of the written notice given by the Corporation or CureVac NL. If the Shareholders collectively express interest in acquiring more shares than the number of shares for which the subscription rights have not been exercised, they shall receive shares each on a *pro-rata* basis calculated by reference to their respective percentage holdings of Shares prior to the capital increase.

11.2 If within a period of 24 months after the registration of the Series B 2020 Capital Increase ("**Exercise Period**") a financing of the Corporation or CureVac NL takes place based on a price per share less than the Share Price (such financing a "**Down Round**") each Series B Investor 2020 is entitled to subscribe for as many new Shares to be issued at par value to the respective Series B Investor 2020 in the context of the Down Round as are required to ensure that the respective Series B Investor 2020 is put in the position as though the Series B 2020 Capital Increase had taken place at the lower per share price used in the Down Round ("**Down Round Right**"). Each Series B Investor 2020 may exercise the Down Round Right only once but, however, it is in the sole discretion of each of the Series B Investors 2020 either to exercise the Down Round Right at the time of and in the context of (i) the first Down Round or (ii) any later Down Round within the Exercise Period. The Parties undertake to take all necessary actions to facilitate the exercise of the Down Round Right.

IV. CORPORATE GOVERNANCE

12. MANAGEMENT BOARD

12.1 The Corporation shall have a management board (the "**Management Board**" (*Vorstand*)), which shall have the powers and responsibilities specified herein and in the Articles. The Management Board is responsible for the management of the Corporation.

- 12.2 The members of the Management Board of the Corporation (collectively, the “**Directors**”) (*Vorstandsmitglieder*) shall be appointed and removed by the Supervisory Board if not otherwise determined in the Articles.
- 12.3 Upon the NL Contribution becoming effective, Section 12.1 shall apply to any management board established at CureVac NL accordingly and members of the management board established at CureVac NL shall be appointed by the general meeting of shareholders of CureVac NL on the basis of a binding nomination by the supervisory board of CureVac NL. References to the “Management Board” throughout this Agreement shall also include such management board of CureVac NL.
- 13. SUPERVISORY BOARD**
- 13.1 The Corporation has a supervisory board (*Aufsichtsrat*) which consists of eight members (the “**Supervisory Board**”).
- 13.2 BMGF has the right to nominate (*entsenden*) (i) by written declaration to the other Shareholders a member of the Supervisory Board of the Corporation (and to remove such member of the Supervisory Board at its sole discretion) and (ii) a member of the Supervisory Board of CureVac NL, if the IPO of the Corporation or CureVac NL, as the case may be, at NASDAQ has not occurred on or before 30 September 2020. All Shareholders shall use their respective shareholders’ and other rights and influence to ensure that this nomination right will be implemented in all corporate and other documents and agreements including the Articles NL. Furthermore, the Parties shall to the extent legally permissible ensure that any established advisory board or any other comparable panel of a Subsidiary or Affiliate of the Corporation shall also give BMGF the right upon its discretion to include a member to be nominated (*entsenden*) in accordance with this Section 13.2.
- 13.3 KfW has the right to designate (*nominieren*) by written declaration to dievini (with a copy to the other Shareholders and the Corporation) one member of the Supervisory Board (and to prompt the recall of such member of the Supervisory Board at its sole discretion) as long as KfW’s shareholding in the share capital of the Corporation or CureVac NL is at least 10%. Furthermore, the Parties shall to the extent legally permissible ensure that any established advisory board or any other comparable panel of a Subsidiary or Affiliate of the Corporation shall also give KfW the right upon its discretion to include a member to be designated (*nominieren*) in accordance with this Section 13.3. If the IPO of the Corporation or CureVac NL, as the case may be, at NASDAQ has not occurred on or before 30 September 2020, this right shall be converted into a nomination right (*Entsendungsrecht*) and shall be re-converted back into a mere designation right (*Nominierungsrecht*) if and as soon as no other Shareholder has a nomination right (*Entsendungsrecht*). All Shareholders shall use their respective shareholders’ and other rights and influence to ensure that this nomination right will be implemented in all corporate and other documents and agreements including the Articles and Articles NL.

- 13.4 The remaining members of the Supervisory Board shall be elected by the shareholders' meeting by simple voting majority.
- 13.5 The Shareholders have the mutual understanding that Lilly, to the extent legally permissible, can be represented by a non-voting observer ("**Observer**") in the Supervisory Board. The Observer shall be duly invited to attend and speak at meetings of the Supervisory Board. The Observer shall be suspended from attending the respective Board meetings regarding any discussions on agenda items/topics might cause a conflict of interest in relation on the part of Lilly and/or its Affiliates (e.g. esp. regarding the Corporation's business activities and/or transactions with third parties); the threatening of such prohibitive conflict of interest shall be interpreted strictly and, already in case of substantiated doubt, shall lead to a suspension of the Observer on such agenda item/topic. Such Observer needs to be either a qualified employee or an external industry expert, in each case as designated by Lilly, and be bound to strict confidentiality obligations.
- 13.6 GSK shall have the right to be represented by an Observer in the Supervisory Board on the same terms and conditions as set out for Lilly in Section 13.5 (the "**GSK Observer Option**"), however, subject to the fulfillment of the following cumulative conditions:
- (a) The IPO of Corporation or CureVac NL, as the case may be, at NASDAQ has not occurred on or before 30 September 2020;
 - (b) the respectively competent merger control authorities have cleared the exercise of the GSK Observer Option under the applicable merger control laws or have declared that the exercise of the GSK Observer Option is not subject to applicable merger control; and
 - (c) GSK has declared in writing vis-à-vis the Corporation or CureVac NL that it intends to exercise the GSK Observer Option.
- The Corporation undertakes to provide reasonable support to GSK in relation to the proceedings before the competent merger control authorities and to provide any information reasonably required for the filing in due time.
- 13.7 The Parties agree that the Supervisory Board shall have the powers and responsibilities specified by applicable law, in the Articles and herein, namely for
- (a) the appointment and removal of Directors;

- (b) the conclusion of service agreements with the Directors, including the terms of their compensation;
- (c) the supervising and advising of the Directors;
- (d) the adoption of the financial statement (*Jahresabschluss*) of the Corporation;
- (e) the adoption of the annual budget of the Corporation;
- (f) approvals of the matters relating to the Corporation's virtual participation plan as set out further in Section 23;
- (g) the adoption of rules of procedure for the Directors which contain *inter alia* transactions, which have significant impact on the business operations and/or the management of the Corporation, including but not limited to, taking up new lines of business and the termination or significant limitation of existing business lines or any significant transactions (*Rechtsgeschäfte*) between the Corporation on the one hand and on the other hand a Shareholder or a Shareholder's Affiliate, which require the approval of the Supervisory Board; the Parties shall procure that as soon as reasonably possible after the registration of the Series B Capital Increase 2020 the Supervisory Board will adopt new rules of procedure for the Directors substantially in the form of **Annex 13.7(g)**;
- (h) the approval of other business transactions that, in terms of their financial volume, term, subject matter, or otherwise go beyond the usual scope of the Corporation's transactions; and
- (i) the approval of any envisaged Share transfers directly or indirectly to a Competitor or to an Affiliate of a Competitor.

13.8 By a simple majority, the Supervisory Board shall elect from amongst its members a chairperson and a vice-chair. If the office of a member of the Supervisory Board terminates before the expiry of its respective term specified in the Articles, the Shareholder that had nominated (*entsandt*) the original member shall without undue delay nominate (*entsenden*) a substitute member. If such nomination (*Entsendung*) has not occurred within two (2) weeks of a respective written request by Shareholders that hold in the aggregate 10% or more of the registered share capital of the Corporation, the substitute member shall be determined by shareholders' resolution which is to be adopted with a simple majority of the votes cast.

13.9 The following persons currently serve as members of the Supervisory Board:

- (a) Baron Jean Stéphane

- (b) Prof. Dr. Friedrich von Bohlen und Halbach
- (c) Dr. Mathias Hothum
- (d) Dr. Ralf Clemens
- (e) Dr. Hans Christoph Tanner
- (f) Dr. Timothy M. Wright
- (g) Craig A. Tooman

- 13.10 The Supervisory Board will meet a minimum of four (4) times a year, at meetings no less than once per calendar quarter. The Supervisory Board shall decide with simple voting majority. In case of a tie, the chairperson shall have the casting vote.
- 13.11 The members of the Supervisory Board shall receive remuneration for their service which amount is for every full fiscal year to be determined by a shareholders' resolution. Furthermore, the members of the Supervisory Board shall receive reimbursement from the Corporation for their reasonable and documented expenses (in particular reasonable travel costs) incurred for the purposes of participating in meetings of the Supervisory Board as well as for participating in other meetings which are held at the request of the Supervisory Board.
- 13.12 The Supervisory Board may adopt a resolution, in particular by establishing rules of procedure for the Management Board to make certain additional actions of the Management Board contingent on such a reservation of approval by the Supervisory Board.
- 13.13 Upon the NL Contribution becoming effective, Section 13.1, Section 13.2, Section 13.3, Sections 13.5 through 13.8 and Sections 13.10 through 13.12 shall also apply accordingly to any supervisory board established at CureVac NL to the greatest extent legally permitted. References to "Supervisory Board" throughout this Agreement shall also include such supervisory board of CureVac NL.
- 13.14 The Shareholders shall procure that a supervisory board established at CureVac NL shall establish a special committee comprising, in any case, representatives of dievini and KfW (as long as dievini and KfW have designation rights). Such committee shall have the competence to decide on capital measures excluding subscription rights of the Shareholders as well as granting and exclusion of subscription rights whereby such measures shall not be taken without consent of dievini's and KfW's representatives (as long as dievini and KfW have designation rights).

14. SHAREHOLDERS' RESOLUTIONS

- 14.1 Shareholders' resolutions of the Corporation and of CureVac NL shall be passed by the respective Shareholders' meeting in accordance with the provisions of the respective articles of association, the applicable laws and this Agreement.
- 14.2 Notwithstanding any applicable mandatory legal requirements, which must be met in any event in order to adopt the following fundamental measures, the Parties agree that any of the following measures will require the consent of dievini, BMGF and each of the Investors in order to be valid and effective:
- (a) any steps taken or measures towards dissolving, liquidating or winding up the Corporation or CureVac NL, or cessation of all or a substantial part of the business of the Corporation or CureVac NL;
 - (b) any amendment to the rights, preferences or privileges of the Series B Shares; and
 - (c) any amendment to the Articles or Articles NL to the extent that any substantial rights of dievini, BMGF, and/or a Series B Investors as Shareholders are likely to be unfairly prejudiced, with "substantial" meaning a negative impact on the valuation of the respective Shareholder's stake in the Corporation or CureVac NL.
- 14.3 The Parties agree that the restrictions in Section 14.2(c) shall not apply to any changes in the share capital structure of the Corporation or CureVac NL (e.g. a dilution of the respective Shareholder's stake in the Corporation or CureVac NL in the course of subsequent financing rounds) observing Section 11 and/or an IPO that has been approved pursuant to the terms of Section 22.1.

15. INFORMATION RIGHTS, FINANCIAL AND INVESTMENT PLANNING

- 15.1 Notwithstanding any statutory information rights, the Corporation and CureVac NL shall furnish to the Supervisory Board:
- (a) Immediately after receipt of the audit report, an audited financial statement (*Jahresabschluss*) of the Corporation and of CureVac NL as of the end of each fiscal year and the related audited statements of income, stockholders' equity and cash flows for the fiscal year then ended, prepared in accordance with German (or Dutch in the case of CureVac NL) generally accepted accounting principles and certified by a firm of independent public accountants selected by the Management Board with approval of the Supervisory Board and a consolidated financial statement of the Corporation and/or CureVac NL to the extent legally required, together with the respective audit report(s);

- (b) not later than thirty (30) days prior to the start of each fiscal year, an annual operating plan for the Corporation and CureVac NL in respect of such fiscal year that shall include (i) monthly projections of profit and loss including a cash flow forecast and a balance sheet projection for such fiscal year, (ii) a business plan for the Corporation and CureVac NL relating to the succeeding fiscal year setting forth in reasonable detail a development plan, financial and investment plan, budgeted and projected figures and other information, and (iii) forecasts for the next succeeding fiscal year. The Supervisory Board will approve the planning by a simple majority;
- (c) within thirty (30) days after each quarter in each fiscal year unaudited quarterly financial statements of the Corporation and CureVac NL as of the end of such quarter and the related unaudited statements of income, stockholders' equity and cash flows for such quarter, prepared in accordance with German (or in the case of CureVac NL, Dutch) generally accepted accounting principles;
- (d) at least by the middle of the year in each fiscal year an update to the annual operating plan including the matters set forth in Section 15.1(b) above showing the differences from the Corporation's or CureVac NL's annual operating plan as initially approved and the Corporation's and CureVac NL's actual results; and
- (e) without unreasonable delay a prompt notice of (i) any material adverse event relating to the Corporation or to CureVac NL and (ii) any lawsuit, claim, proceeding or investigation pending or, to the knowledge of the Corporation or CureVac NL, threatened, or any judgment, order or decree involving the Corporation that would reasonably be expected to have a material adverse effect on the Corporation or on CureVac NL.

16. PROFIT DISTRIBUTION, RETIREMENT OF SHARES

The Shareholders agree not to pass resolutions for distributions (*Ausschüttungen*) or dividends or any redemption (*Einziehung*) of Shares of the Corporation without the approval of BMGF at its discretion as long as the BMGF Funds that have been invested in the Corporation have not yet been used by the Corporation in accordance with the requirements of Section 8(a).

V. DISPOSAL OF SHARES

17. LIMIT OF TRANSFERABILITY

17.1 The sale (including by the way of share swap, contribution and merger), transfer, assignment, pledging, or any Encumbrance of Shares (as applicable) is deemed a “**Share Transfer**”. For the purposes of this Section 17, all Share Transfers set out in lit. (a) through (c) of Section 17.3 below shall be designated as “**Permitted Transfers**”. Notwithstanding any provision to the contrary in this Agreement, the Parties agree that no Shareholder may enter into or consummate, directly or indirectly, a Share Transfer to a Competitor or to an Affiliate of a Competitor without the prior written consent of the Supervisory Board of the Corporation or CureVac NL.

17.2 Other than in the case of a Permitted Transfer, a Shareholder who intends to transfer a part or all of his present or future Shares (the “**Sale Shares**”) with or without consideration (the “**Selling Shareholder**”) shall inform the Corporation or CureVac NL, respectively, and the remaining Shareholders (the “**Remaining Shareholders**”) by written notice (*Schriftform*) in accordance with § 126 BGB sent by courier letter via a highly reputed courier service (e.g. (but not limited to) DHL or FedEx) only (the “**Registered Letter**”) (collectively, the “**Transfer Notice**”). The Transfer Notice of the Selling Shareholder shall reflect, as far as possible, the following information:

- (a) Name/company and address/registered office of the Selling Shareholder;
- (b) Nominal amount and class (Series A, Series B, or Series C) of the Sale Shares as well as name/company and address/registered office of the prospective buyer;
- (c) Purchase price and/or other consideration for the intended sale/transaction;
- (d) Due date of the purchase price and/or other consideration;
- (e) Representations and warranties undertaken by the Selling Shareholder.

In the case of a Permitted Transfer (other than a Permitted Transfer made pursuant to Section 17.3(a) below in which case this Section 17.2(a) through 17.2(e) shall fully apply), the Shareholder who intends to make the Permitted Transfer shall inform the Corporation or CureVac NL, respectively, and the Remaining Shareholders by written notice (*Schriftform*) in accordance with § 126 BGB sent by Registered Letter (the “**Permitted Transfer Notice**”); such Selling Shareholder’s obligation in relation to the Remaining Shareholders is deemed to be complied with if the Registered Letters are dispatched to the addresses of the respective Remaining Shareholders set forth in this Agreement or – as the case may be – to such Remaining Shareholders’ new addresses as provided to the Selling Shareholder by Registered Letter. The Permitted Transfer Notice of the Selling Shareholder shall reflect the information set out in Sections 17.2(a) and 17.2(b) above.

17.3 Other than as set out in this Section 17.3, a Share Transfer requires the Corporation’s or CureVac NL’s approval (by consent of the Management Board based on a Shareholders’ resolution in their discretion with a 100% majority of the votes cast) in order to be valid. The following Permitted Transfers shall not be subject to the restriction set out in phrase 1 of this Section 17.3, in each case provided that the relevant transferee executes an Accession Agreement to this Agreement (save if the relevant transferee is a Shareholder) and that such Share Transfer is otherwise made in accordance with the terms of this Agreement:

- (a) a Share Transfer where the Drag Along Right and any subsequent prerequisites set forth in Section 20 in relation to a Trade Sale have been properly observed as well as the Right of First Refusal (Section 19) and/or any Tag Along Right and any subsequent prerequisites set forth in Section 18 have been observed properly; it being understood that those shares transferred within the scope of the Share Transfer according to the aforementioned sentence pursuant to the Tag Along Right (Section 18), the Right of First Refusal (Section 19) and the Drag Along Right (Section 20) shall as well be permitted hereunder,
 - (b) a Share Transfer made pursuant to Section 17.5 and
 - (c) a Share Transfer by a Shareholder to an Affiliate, provided that such Affiliate remains an Affiliate of the original holder of the transferred Shares or other interests at all times while the restriction set forth in this Section remains effective. The Shareholders undertake to procure that the transferred Shares are re-transferred from the transferee to the original holder of the transferred Shares, if and when the transferee ceases to be an Affiliate of the original holder of the Shares. For the purposes of transfers to Affiliates pursuant to this Section 17.3(c), the Parties agree that each of the Baillie Gifford Entities and Baillie Gifford & Co (including its Affiliates), and any fund, company or corporate entity (such entities being professional financial investors comparable to the Investors listed as parties 11 through 13 hereto at the date of this Agreement) on whose behalf Baillie Gifford & Co (or any one of its Affiliates) manages funds (and, for the avoidance of doubt, does not solely provide investment advice or comparable services without managing funds), shall be deemed to be Affiliates of each other including (but not limited to) in cases where in the reasonable judgment of the relevant Baillie Gifford Entity a transfer pursuant to Section 17.5(d) is required to comply with the Investment Company Act, as amended, and regulations promulgated thereunder.
- 17.4 The provisions of Sections 17.1 and 17.3 apply accordingly to the granting of trusteeships, sub-interests, the establishment of silent companies and other encumbrances as well as the granting of rights favoring Third Parties to the Shares.
- 17.5 With respect to intra-group transfers of Shares, the Parties agree that Section 18 and Section 19 shall not apply to any transfers by dievini, BMGF, or any of the Investors (whether such transaction is with or without consideration) to any of their respective Affiliates (including those specified in Section 17.3(c) above, if applicable), or any beneficiary or any trust or any account or arrangement managed by dievini, BMGF, or any of the Investors (as applicable) or any entity of which the beneficiaries are the same group of people or entities as set out below, provided in each case, that the respective transferee has joined this Agreement in legal succession to the respective transferor, unless at that point in time the transferee will already be a party hereto. In particular,

- (a) dievini may at any time transfer all its Shares in whole or in part to a third party who is either a Relative or a member of the family of Mr. Dietmar Hopp, Walldorf, (the “**Hopp Family**”) or an entity, in which any member of the Hopp Family, or a Relative to a member of the Hopp Family or dievini (including its shareholders, their Relatives and the management board of dievini and, for the avoidance of doubt, the dievini management board members Prof. Dr. Christof Hettich and Dr. Friedrich von Bohlen also as private individuals) directly or indirectly has a decisive (*bestimmend*) influence on the third party or directly or indirectly has a decisive (*bestimmend*) interest in the third party; dievini will notify the Corporation or CureVac NL of any such assignment, including the identity of the assignee, in a timely manner. For the avoidance of doubt, if dievini transfers its Shares as permitted by this Section, all of dievini’s rights associated with such shares will also be transferred.
- (b) BMGF may at any time transfer its Shares in whole or in part to a third party who is (i) a successor charitable organization of BMGF that is a tax-exempt organization as described in section 501(c)(3) of the Code, or (ii) a tax-exempt organization as described in section 501(c)(3) of the Code controlled by one or more trustees of BMGF. BMGF will notify the Corporation or CureVac NL of any such assignment, including the identity of the assignee, in a timely manner. For the avoidance of doubt, if BMGF transfers its Shares as permitted by this Section, all of BMGF’s rights associated with such shares will also be transferred.
- (c) dievini may at any time transfer 1/3 of the dievini Tranche II Series B Shares to BMGF.
- (d) Notwithstanding any provision to the contrary set forth in this Agreement, if any Mutual Fund Investor or its transferee is required by the Investment Company Act (including the rules and regulations promulgated thereunder) or the constitutive documents governing the transferring fund to dispose of some or all of their Shares, Section 18 shall not apply to such disposition.
- (e) Jupiter and/or Harborside may at any time transfer all of their respective Shares in whole or in part to a third party who is either a Relative or a member of the family of Mr. José Coppel and Mr. Augustín Coppel, (the “**Coppel Family**”) or an entity, in which any member of the Coppel Family, or a Relative to a member of the Coppel Family or Jupiter and/or Harborside (including its shareholders, their Relatives and the management board of Jupiter and/or Harborside) directly or indirectly has a decisive (*bestimmend*) influence on the third party or directly or indirectly has a decisive (*bestimmend*) interest in the third party; Jupiter and/or Harborside, as the case may be, will notify the Corporation or CureVac NL of any such assignment, including the identity of the assignee, in a timely manner. For the avoidance of doubt, if Jupiter and/or Harborside transfers their respective Shares as permitted by this Section, all of Jupiter’s and/or Harborside’s rights respectively associated with such shares will also be transferred.

- (f) Chartwave may at any time transfer all its Shares in whole or in part to a third party, provided such third party is a party in which Chartwave has directly or indirectly a decisive (*bestimmend*) influence or a decisive (*bestimmend*) interest; Chartwave will notify the Corporation or CureVac NL of any such assignment, including the identity of the assignee, in a timely manner. For the avoidance of doubt, if Chartwave transfers its Shares as permitted by this Section, all of Chartwave's rights associated with such shares will also be transferred.
- (g) Each Series B Investor 2016, Series B Investor 2017, the Series B Investor 2019 and each Series B Investor 2020 may at any time transfer all its Shares in whole or in part to an Affiliate (however, for the purpose of this Section only, Baden-Württembergische Versorgungsanstalt für Ärzte, Zahnärzte und Tierärzte, Tübingen, the ultimate beneficial owner of the Fund, is deemed to be an Affiliate in relation to the Series B Investor 2016 and the Series B Investor 2020 LBBW AM) of the respective Series B Investor 2016, the Series B Investor 2017, the Series B Investor 2019 and the respective Series B Investor 2020 and / or a minority participation of the respective Series B Investor 2016, the Series B Investor 2017, the Series B Investor 2019 or the respective Series B Investor 2020, in which the respective Series B Investor 2016, the Series B Investor 2017, the Series B Investor 2019 or the respective Series B Investor 2020 directly has a decisive (*bestimmend*) influence, provided such Affiliate or such minority participation of the respective Series B Investor 2016, the Series B Investor 2017, the Series B Investor 2019 or the respective Series B Investor 2020 remains an Affiliate or minority participation as qualified above of the respective Series B Investor 2016, the Series B Investor 2017, the Series B Investor 2019 or the respective Series B Investor 2020 at all times while the restriction set forth in Section 17.3 remains effective.
- (h) Vico may at any time transfer all its Shares in whole or in part to ELMA and *vice versa*.

17.6 The Parties agree that Section 18 and Section 19 shall not apply to any transfers of a Founder to an entity which is directly controlled (100%) by such transferring Founder, provided such entity joins this Agreement in legal succession to the particular Founder without said Founder's personal obligations being affected thereby. However, each transferring Founder shall be each individually obliged to secure that the respective transferred Shares will have to be retransferred to the transferring Founder if the receiving entity is not an entity directly controlled by such Founder any more or if the shares in the receiving entity are pledged or encumbered.

17.7 Each Shareholder acknowledges and agrees that the Shares have not been registered under the United States Securities Act (“**Securities Act**”). Accordingly, each Shareholder agrees that it, its Affiliates and any person acting on its behalf, will not offer, sell or otherwise transfer Shares within the United States except (i) pursuant to registration under, or (ii) pursuant to an exemption from, or in a transaction not subject to, the registration requirement of the Securities Act; for the purposes of this Section 17.7, the term “Affiliate” shall have the meaning set forth in Rule 405 under the Securities Act.

17.8 For the avoidance of doubt, to the extent that the approval for any Permitted Transfers pursuant to Sections 17.3(a) through 17.3(c) is required under either statute or the Articles, the Corporation or CureVac NL, respectively, (by consent of the Management Board) shall approve such Permitted Transfer, and shall take any additional actions as may be necessary to give effect to such Permitted Transfer. In such case, to the extent legally permissible, the Shareholders shall use all reasonable efforts to procure that the Corporation or CureVac NL, respectively, (by its Management Board) approves such Permitted Transfer; should the Corporation or CureVac NL refuse to grant its approval, the Shareholders undertake to hold an extraordinary shareholders’ meeting of the Corporation or CureVac NL waiving all statutory provisions and provisions of the Articles or Articles NL as to holding and convening a shareholders’ meeting without undue delay and, in this shareholders’ meeting, to pass an unanimous shareholders’ resolution prompting the Corporation or CureVac NL to grant the approval for the respective Permitted Transfer.

18. TAG ALONG RIGHT

In case one or several Shareholders together holding at least 50% of the Shares (in each case a “**Tag Along Shareholder**”) serve a Transfer Notice on the Remaining Shareholders about an intended transfer of Sale Shares to a Third Party (not qualifying as an intra-group transfer pursuant to Section 17.5) such that it or they would collectively – or, in the case of dievini, it would together with the Shares held by KfW – subsequently hold less than 45% of the Shares in the Corporation or CureVac NL, then such Tag Along Shareholder(s) shall ensure that the Remaining Shareholders shall have the right to sell along, transfer and/or swap their Shares in the Corporation or CureVac NL on the same economical terms – save for Section 21 if the prerequisites are met – agreed between the Tag Along Shareholder and the respective buyer to the respective Third Party buyer (the “**Tag Along Right**”). As part of the Tag Along Right the Tag Along Shareholder shall offer the Shares of which the co-sale is demanded (the “**Co-Sale Shares**”) to the respective Third Party buyer in addition to the Sale Shares. If, in addition to the Sale Shares, the respective Third Party buyer is not prepared to also acquire the Co-Sale Shares, at the request of the Shareholders having exercised their Tag Along Rights, the Tag Along Shareholder shall procure that the Sale Shares and the Co-Sale Shares are sold in proportion to the shareholding of the Tag Along Shareholder and the Shareholders having exercised their Tag Along Rights. The Tag Along Right shall be exercised by the relevant Shareholder by written notice (*Schriftform*) in accordance with § 126 BGB sent by Registered Letter to the Tag Along Shareholder within three (3) weeks after receipt of the Transfer Notice (as defined above) by the respective Shareholder. Section 19 shall remain unaffected.

19. RIGHT OF FIRST REFUSAL

- 19.1 Each of the Investors, dievini and BMGF shall be entitled to purchase all of the Sale Shares on the same terms and conditions as stated in the Transfer Notice to have been negotiated between the Selling Shareholder and any Third Party as set forth in Section 17 (the “**Right of First Refusal**”) (*Vorkaufsrecht*) as set forth below. The Selling Shareholder who wished to transfer his Shares and who has negotiated with a Third Party a sale and transfer agreement shall send the purchase agreement to the Investors, to dievini and to BMGF. The Investors, dievini and BMGF may exercise their respective Right of First Refusal within three (3) weeks after receipt of the purchase agreement by written declaration. After such three (3) week period, the Selling Shareholder who wishes to transfer his Shares shall inform each Investor, dievini and BMGF whether the other Investors, dievini and BMGF exercised their respective Right of First Refusal. If not all Investors, dievini and BMGF exercised their respective Right of First Refusal, the Investors, dievini or BMGF who did exercise their respective Right of First Refusal may acquire the remaining Sale Shares within ten (10) Banking Days after receipt of the notice. In case that more than one Investor, dievini or BMGF intends to exercise his Right of First Refusal, each of the Investors, dievini and BMGF shall have the right to purchase the Sale Shares on a *pro-rata* basis, calculated by reference to their respective percentage holdings of Shares as per the date of the Transfer Notice. Should no Investor, dievini or BMGF exercise the Right of First Refusal within the aforementioned three (3) week time period, the Right of First Refusal is deemed not to be exercised.
- 19.2 The Right of First Refusal shall be exercised by written notice (*Schriftform*) in accordance with § 126 BGB sent by Registered Letter to the Selling Shareholder at its address as shown in the books of the Corporation. The Registered Letter shall be deemed to be received not later than five (5) Banking Days after the date on which it is mailed in case the acceptance is refused by the Selling Shareholder. The transfer restrictions set forth in Sections 17 and 18 shall remain unaffected by the provisions of this Section 19 (including the Right of First Refusal).
- 19.3 In case of a share swap the relevant consideration shall be the fair market value of the swapped Shares. For listed companies, the consideration corresponds to the share price on the day of the mailing of the Transfer Notice according to Section 17.1; for non-listed companies, the fair market value shall be determined by an auditor appointed unanimously by the Shareholders (if the Shareholders cannot agree on an auditor within fourteen (14) Banking Days, on request of either Shareholder the auditor shall be nominated by the *Institut der Wirtschaftsprüfer e.V.* in Düsseldorf). The same shall apply in case of any other consideration.

- 19.4 In case that the procedures as set forth in Section 19.1 (*Right of First Refusal*) have been observed properly by the Selling Shareholder, and the Investors, and/or dievini and/or BMGF did not purchase all of the Sale Shares by way of the Right of First Refusal, the Selling Shareholder may within the following six (6) months freely dispose of such Shares that have not been purchased on conditions no less favorable for the Selling Shareholder than those outlined in the Transfer Notice. Section 17.3(a) through 17.3(c) above remain unaffected.
- 19.5 The rights of the Investors, of dievini and of BMGF under this Section 19 shall be exercisable among those of the Investors, dievini and BMGF electing to exercise any of such rights in proportion to their respective shareholdings at that time.
- 19.6 For the avoidance of doubt, the Right of First Refusal shall not apply to any Share Transfer in accordance with Section 10.1 above.
- 19.7 The Right of First Refusal shall apply *mutatis mutandis* to any proposed issuance of treasury shares (*eigene Aktien*) by the Corporation or CureVac NL to a Shareholder or to a Third Party unless resolved otherwise by the respective Shareholders' meeting.

20. TRADE SALE / ASSET DEAL / DRAG ALONG RIGHT

- 20.1 In the event a buyer which is a *bona fide* Third Party, unrelated to the Shareholders, (i) intends to purchase (including by way of a share swap, contribution or merger) all or substantially all of the Shares (i.e., covering at least 85% of the Shares in the Corporation or CureVac NL) (the "**Trade Sale**"), or (ii) intends to enter into an Asset Deal or any measure pursuant to the German Transformation Act (*Umwandlungsgesetz*) in relation to the Corporation or respective applicable provisions under the Dutch law in relation to CureVac NL (the "**Measure**") (the Trade Sale, the Asset Deal and the Measure each and collectively the "**Exit-Transaction**"), upon the written request (*Schriftform*) in accordance with § 126 BGB of the shareholder(s) holding (collectively) at least 85% of the Shares in the Corporation or CureVac NL, as the case may be, and intending to trigger the Exit-Transaction (together the "**Exit Shareholder**") (or an Exit Shareholder's Affiliate or a person or entity that falls under the definition set out in Section 17.5 that has taken over in each case the majority of the Exit Shareholder's Shares) sent by Registered Letter to all Shareholders they shall be obliged to sell and transfer, swap or convert (e.g., mergers) on a *pro-rata* basis (relative ownership in the Corporation's or CureVac NL's share capital) and on the same economical terms (including accepting in-kind contribution) – save for Section 21 if the prerequisites are met – their shares to the *bona fide* Third Party, unrelated to the Shareholders, (the "**Drag Along Right**") and/or to take up all other measures required to effect such Exit-Transaction.

- 20.2 For purposes of Section 20.1 with respect to the Exit Shareholder, a *bona fide* Third Party, unrelated to the Shareholders, shall mean anybody not being a permitted transferee as set out in Section 17.5.
- 20.3 For the avoidance of doubt, the Shareholders agree that in the event of a Trade Sale pursuant to this provision, Section 19 (Right of First Refusal etc.) shall not apply. However, if one or more Shareholders - with the exception of the Exit Shareholder - or the Corporation or CureVac NL receive an offer by a *bona fide* Third Party, unrelated to the Shareholders, to enter into an Exit Transaction, the relevant Shareholder(s) and/or the Corporation or CureVac NL, as appropriate, shall as soon as practicable inform the Supervisory Board of the Corporation or CureVac NL (as the case may be) of the respective entity by written notice (*Schriftform*) in accordance with § 126 BGB sent by Registered Letter of such offer. The written notice provided to the Supervisory Board shall include the information according to Sections 17.2(a) and 17.2(c). The Supervisory Board will have twenty-five (25) Banking Days after it has been notified to discuss the offer by the *bona fide* Third Party, unrelated to the Shareholders, it being understood that before the expiry of this twenty-five (25) Banking Days period the Shareholders shall not enter into definitive agreements regarding the Exit Transaction. All Parties shall keep all information received in connection with the *bona fide* Third Party, unrelated to the Shareholders, offer and any counteroffer confidential. Section 30 shall apply *mutatis mutandis*.
- 20.4 The Remaining Shareholders may prevent the exercising of the Drag Along Right by the Exit Shareholder pursuant to Section 20.1 by declaring with written notice (*Schriftform*) in accordance with § 126 BGB within eight (8) weeks from receipt of the written request by the Exit Shareholder, which must include the buyer and the terms and conditions of the intended Exit Transaction sent by Registered Letter to the Exit Shareholder, that they either themselves and/or one or more of their Affiliate(s) and/or one or more other *bona fide* Third Party(ies), unrelated to the Shareholders, intend(s) to acquire the Shares from the Exit Shareholder which the Exit Shareholder intends to sell to a *bona fide* Third Party as described above, on the same terms and conditions that are offered by such *bona fide* Third Party, unrelated to the Shareholders, and by submitting sufficient proof of credit-worthiness. In so far as the acquisition is made in this case by one or more other *bona fide* Third Part(y)(ies), unrelated to the Shareholders, the Remaining Shareholders are liable as absolute guarantors, or provide other or additional forms of security as the Exit Shareholder may reasonably require, on a *pro-rata* basis for the fulfilment of the purchase price obligation of such other *bona fide* Third Party(ies), unrelated to the Shareholders, named by them. In order to enable the Remaining Shareholders to exercise the right under this Section 20.4, the Exit Shareholder will notify the other Shareholders, while upholding the justified confidentiality interests of a potential buyer, as early as possible about such negotiations for which the Exit Shareholder wants to trigger its Drag Along Right according to Section 20.1.

VI. SPECIAL RIGHTS OF SHAREHOLDERS

21. ALLOCATION OF EXIT PROCEEDS

21.1 The following terms shall have the meaning ascribed to them as follows:

- (a) **“Total Investment”** shall mean the sum of all contributions (including – if any - the conversion of shareholders’ (convertible) loans and respective interest accrued thereon) by a Shareholder and their legal successors in the equity (*Eigenkapital* within the meaning of § 272 HGB) of the Corporation (i.e., contributions in the stated capital including any premium (*Agio*) and/or other payments in the capital reserves of the Corporation according *inter alia* to § 272 para. 2 HGB) to the Corporation up to the Exit Event in connection with the issuance of the Series B Shares. In case a Shareholder has purchased and acquired existing Shares from another Shareholder, all contributions made in the equity with respect to such Shares shall no longer be attributed to the selling Shareholder and instead attributed to the acquiring Shareholder.
- (b) **“Exit Event”** shall mean any of the following events, and **“Exit Proceeds”** shall mean the distributable proceeds derived from:
 - (i) A sale of more than 70% of the share capital of the Corporation to a Third Party (excluding those persons defined in Sections 17.5(a), and 17.5(b) as well as 17.5 (e) to 17.5(g)) as part of a share deal in a single transaction or a series of related transactions (including after exercising the Drag Along Right according to Section 20);
 - (ii) A sale of the total or a predominant part (minimum 70% of the market value) of the Corporation’s tangible and intangible assets (*Wirtschaftsgüter*) (calculated at fair market value) to a Third Party (excluding any person defined in Sections 17.5(a) and 17.5(b)) as part of an asset deal or a plurality of successive asset deals (**“Asset Deal”**), provided that in the event of successive transactions, the asset ratios at the time of the first individual transaction are to be used for calculating the definitive total rate of the above 70% threshold and then to add in relation thereof the rates of the following individual transactions for the assets existing at that time. To the extent that the Shareholders collect funds which derive from such individual transactions based on profit distributions by the Corporation, which do not take place by claiming the liquidation preferences, they are not required to provide them again to service the liquidation preferences;

- (iii) A share swap, contribution of shares or the assets of the Corporation, a merger or another act of conversion as part of the Conversion Act (*Umwandlungsgesetz*) with a Third Party (excluding any person defined in Sections 17.5(a) and 17.5(b) as well as in Sections 17.5(e) to 17.5(g)) under the condition that the Shareholders of the Corporation hold less than 50% of the voting rights in the new company as a result of such a transaction, provided that the so derived Exit Proceeds shall to the extent possible be distributed by transferring (if applicable after completion of the transaction between the former shareholders) shares that they have received as consideration for the Shares in the Corporation. If a transfer of such new company shares is not possible (for example, because they are subject to transfer restrictions), such shares which would be transferred pursuant to the previous sentence to the parties entitled to such Exit Proceeds are to be held on behalf of the parties entitled to them in trust (i.e., by disbursing the revenue from the relevant shares or their sale, but without impairing the other shareholder rights, in particular the voting right) by the parties obligated to distribute Exit Proceeds. Settling the Exit Proceeds in cash is not required in this case. The Investors, dievini and BMGF, however, may elect to cooperate in the fulfilment of the Series C Liquidation Preference (as defined below) by transferring shares or by holding in trust the relevant shares or by payment of a corresponding amount in cash. The exchange ratio definitive for the transaction itself will apply to the evaluation of the shares and accordingly the calculation of the Exit Proceeds as well as the shares to be assigned in consequence thereof; or
- (iv) the liquidation of the Corporation.

21.2 In case of an Exit Event, subject to Section 21.5 the Shareholders hereby agree that the Exit Proceeds shall be allocated as follows:

- (a) The Series B Shareholders will first receive from the Exit Proceeds 100% of their respective Total Investment (“**Series B Liquidation Preference**”), provided that in the case of an Exit Event pursuant to Section 21.1(b)(i) or economically similar cases in terms of Section 21.1(b)(iii), the Exit Proceeds to be distributed hereunder shall be reduced according to the percentage at which the Shares of the Corporation are not sold in the relevant Exit Event. If the Exit Proceeds are insufficient to completely satisfy the rights of the Series B Shareholders under the Series B Liquidation Preference, the Exit Proceeds will be distributed to the Series B Shareholders *pro rata* based on the proportion their Total Investment for the Series B Shares bears to the aggregate Total Investment for the Series B Shares in the Corporation. For the avoidance of doubt, the distribution in proportion to the Total Investment only applies to the Series B Liquidation Preference, but not to further proceeds to be distributed to all Shareholders according to their percentage of ownership upon the payment of all liquidation preferences as set out in the following lit. (b).

- (b) The remaining amount of the Exit Proceeds will be distributed among the Shareholders (including the Series B Shareholders) in proportion to their percentage of ownership in the Corporation as at the time of an Exit Event subject to the following Section 21.3.
- (c) For the avoidance of doubt, a Series B Shareholder shall benefit from the Series B Liquidation Preference as set forth in Section 21.2(a) only if and to the extent such Series B Shareholder has (co-)sold its Series B Shares in an Exit Event.

21.3 The preferential rights of Series C Shares grant the following “**Series C Liquidation Preference**”, provided that in the case of an Exit Event pursuant to Section 21.1(b)(i) or economically similar cases in terms of Section 21.1(b)(iii), the key values of the following thresholds of EUR 223 million, EUR 780 million, and EUR [1,000 million] will be reduced by the percentage at which the shares of the Corporation are not sold in the context of the transaction(s) triggering the relevant Series C Liquidation Preference:

- (a) If the Exit Proceeds are less than or equal to EUR 223 million, then the portion of Exit Proceeds which accrues to the owners of the Series C Shares after completion of the Series B Liquidation Preference from the Exit Proceeds shall be:

$(\text{Exit Proceeds} - \text{Series B Liquidation Preference}) \times \text{percentage of ownership}$.

- (b) If the Exit Proceeds exceed EUR 223 million, then the portion of Exit Proceeds which accrues to the owners of the Series C Shares after completion of the Series B Liquidation Preference from the Exit Proceeds exceeding EUR 223 million and up to (and including) EUR 780 million will be multiplied by a factor of 1.5 (“**C.1 Liquidation Preference**”), i.e.,

$(\text{EUR 223 million} - \text{Series B Liquidation Preference}) \times \text{percentage of ownership}$

+ $(\text{Exit Proceeds} - \text{EUR 223 million}) \times \text{percentage of ownership} \times 1.5$

- (c) If the Exit Proceeds exceed EUR 780 million, then – in addition to the C.1 Liquidation Preference – the portion of Exit Proceeds which accrues to the owners of the Series C Shares after completion of the Series B Liquidation Preference from the Exit Proceeds exceeding EUR 780 million and up to (and including) EUR 1,000 million will be multiplied by a factor of 2 (“**C.2 Liquidation Preference**”), i.e.,

$(\text{EUR 223 million} - \text{Series B Liquidation Preference}) \times \text{percentage of ownership}$

+ EUR 557 million x percentage of ownership x 1.5
+ (Exit Proceeds - EUR 780 million) x percentage ownership x 2.

- (d) If the Exit Proceeds exceed EUR 1,000 million, then – in addition to the C.1 and C.2 Liquidation Preferences – the portion of Exit Proceeds which accrues to the owners of the Series C Shares after completion of the Series B Liquidation Preference from the Exit Proceeds exceeding EUR 1,000 million will be multiplied by a factor of 3 (“**C.3 Liquidation Preference**”), i.e.,

(EUR 223 million - Series B Liquidation Preference) x percentage of ownership

+ EUR 557 million x percentage of ownership x 1.5
+ EUR 220 million x percentage of ownership x 2
+ (Exit Proceeds - EUR 1,000 million) x percentage of ownership x 3.

- (e) To the extent that the Series C Liquidation Preference exceeds the amount to which the owners of Series C Shares would be entitled after complete satisfaction of the Series B Liquidation Preference without the Series C Liquidation Preference, the participation in Exit Proceeds by the owners of Series B Shares remaining after completion of the Series B Liquidation Preference will be reduced by this amount.
- (f) The Corporation and the owners of the Series B Shares agree in each case to provide to the owners of the Series C Shares all necessary information required to present and calculate the Series C Liquidation Preference. Section 21.2(c) applies accordingly.

21.4 Examples of the complete distribution of various proceeds amounts are attached in **Annex 21.4** to explain the above liquidation preferences.

21.5 If in an Exit Event a Shareholder does not (co-) sell all his Shares held in the Corporation as at that time but only a portion thereof, the Exit Proceeds to be distributed to such Shareholder under this Section 21 shall be reduced proportionately.

22. INITIAL PUBLIC OFFERING (IPO) AND SUBSEQUENT MEASURES

22.1 Upon request of a majority of the votes attaching to the Series B Shares, the Shareholders agree to use their collective best efforts to cause the Corporation or CureVac NL to effect an Initial Public Offering (the “**IPO**”) at a Recognized Stock Exchange.

- 22.2 The terms of any such IPO (including the appointment of an internationally recognized investment bank to effect such an IPO) shall be determined by the Management Board, subject to the prior approval of the majority of all Shareholders. Each Shareholder agrees to take all such actions which are available to it in its capacity as a Shareholder to facilitate such IPO (including, but not limited to, voting with its Shares in favour of any proposal by the Management Board in connection with such IPO). For the avoidance of doubt, it is agreed that none of the Series B Shareholders shall be obliged to make any additional capital and/or other financial contributions and/or incur any liability (however, for the avoidance of doubt, not excluding a Major Shareholder's Potential IPO Liability, as the case may be) for the purpose of an IPO. The Corporation and CureVac NL agree, subject to any restrictions imposed by any applicable law, to pay all the fees and expenses incurred in connection with any such IPO (it being understood that the Corporation shall not be liable for the payment of any underwriting commissions or discounts in connection with any such IPO with respect to Shares sold therein by or on behalf of any Shareholder). If the intended IPO is not completed (no first listing), the Parties hereto undertake to ensure that all steps and measures shall be implemented and consummated required to revise the Articles or Articles NL, as the case may be, formally and contentwise to put them essentially into a state they had in their material substance been (subject to legal and factual practicability) in at the date on which the Shareholders have resolved upon the kick-off of the IPO process in accordance with Section 22.1.
- 22.3 Each Shareholder shall be obliged to comply with all regulations, conditions and restrictions applicable to the stock exchange and the exchange segment concerned and take all measures required in order to procure and not block or prevent a listing of the Corporation's or CureVac NL's shares.
- 22.4 In the event that the stock exchange listing requires a restructuring of the Corporation (e.g., the transfer of the Shares to a foreign holding company, in particular in CureVac NL, in return for the issue of shares in that company),
- (a) then all Shareholders and the Corporation are upon request of the relevant Investor, of dievini or of BMGF obliged to approve any such restructuring measures and to make all other declarations necessary for this purpose and to support all transactions to effect such restructuring, provided that the Shareholders shall not be obliged to make any additional capital or other financial contributions. In case a Shareholder will incur unreasonable tax disadvantages or other unreasonable liability as a consequence of the envisaged restructuring measure, the Shareholders shall discuss in good faith to find another way to implement the envisaged restructuring.
 - (b) the Parties agree that any Shares of the Corporation to be transferred to a foreign holding company, in particular into CureVac NL, shall be transferred on basis of their respective tax book value (*Buchwert*). In the context, the Parties also agree that the foreign holding company, in particular CureVac NL, shall file an application for continuation of tax book value (*Antrag auf Buchwertfortführung* acc. to Sec. 21 par. 1 second and third sentences German Tax Conversion Act - *UmwStG*) regarding the Shares of the Corporation to be transferred as set out above with the respectively competent tax authorities within four (4) months after the date of this Agreement at the latest. Furthermore, CureVac NL shall inform all other Parties as soon as the application has been filed.

- 22.5 In particular the Management Board shall be obliged to subject themselves to and comply with all lock-up and corporate governance provisions which are required under the terms for the particular stock market listing procedure, the admission for trading on a specific stock exchange and/or on the specific market segment or by the underwriting agent in connection with the IPO, and upon request of any Shareholder the Management Board shall report on these provisions to the Shareholders.
- 22.6 Taking into account the potential exposure of any Shareholder holding at least 10% of any class of the Corporation's and/or CureVac NL's shares (each a "**Major Shareholder**"; with respect to KfW as long as qualifying as a Major Shareholder for purposes of this definition also including the Federal Republic of Germany ("**Bund**")) in the event of an IPO at an US-stock exchange due to the size of each Major Shareholder's investment, the following provisions for the benefit of each Major Shareholder shall apply:
- (a) The Corporation and/or CureVac NL, as applicable, shall, and the Shareholders shall cause the Corporation and/or CureVac NL to, inform any Major Shareholder with respect to any IPO process (or subsequent SEC-registered offering process) and shall give any Major Shareholder access to the draft IPO documentation (or draft documentation in relation to any subsequent SEC-registered offering) including any additional notifications to the US Securities and Exchange Commission ("**SEC**") (collectively, the "**IPO Documentation**"), if and to the extent this is reasonably requested by a Major Shareholder to evaluate its potential liability exposure arising from such Major Shareholder being a "control person" under applicable US securities-laws and related regulations (in each case, the "**Major Shareholder's Potential IPO Liability**").
 - (b) The Corporation and/or CureVac NL, as applicable, shall, and the Shareholders shall cause the Corporation and/or CureVac NL to, discuss and take into account any Major Shareholder's input to the IPO Documentation if and to the extent such input is (i) in a Major Shareholder's opinion directly related to the respective Major Shareholder's Potential IPO Liability and (ii) furnished within two (2) business days after such IPO Documentation has been provided to the respective Major Shareholder (it being understood that any IPO Documentation provided to a Major Shareholder after 6 p.m. (CET) shall be deemed to have been delivered on the following business day) (the "**Reaction Time Limit**") provided, however, that if CureVac NL is required by US securities law to make such filing within a time that is shorter than the Reaction Time Limit, CureVac NL shall deliver such documents to the Major Shareholders with a written notice of the specific deadline that the Major Shareholders' input is required in order for CureVac NL to comply with the US securities law.

- (c) The Corporation and/or CureVac NL, as applicable, shall, and the Shareholders shall cause the Corporation and/or CureVac NL to, provide, upon reasonable request of a Major Shareholder, such Major Shareholder with access to due diligence related documents to be provided relative to the IPO Documentation's preparation and discuss with the Major Shareholder due diligence related questions, if and to the extent this is reasonably required by the Major Shareholder in its opinion to evaluate its respective Major Shareholder's Potential IPO Liability.
 - (d) With respect to the IPO Documentation, an identification of a Major Shareholder by name or the mention of any agreements in which the Major Shareholder is participating shall be subject to such Controlling Shareholder's prior consent (not to be unreasonably withheld). If a Major Shareholder does not communicate its decision to the Corporation or CureVac NL within the Reaction Time Limit, such Major Shareholder's consent is deemed to have been granted.
 - (e) Upon its respective written request, any Major Shareholder shall be added to the prospectus liability insurance as amended by the Corporation in connection with the IPO, in any case, restricted to any Major Shareholder's Potential IPO Liability (the "**Major Shareholders' Insured Risk**") as a named insured and the costs for such Major Shareholders' Insured Risk shall be ultimately borne by the respective Major Shareholder.
 - (f) Section 30.1 shall apply accordingly.
- 22.7 In addition to the rights set out in Section 22.6 above, in the event of any future sale (after the IPO) by a Major Shareholder of all or part of the Shares held by it, any such Major Shareholder shall be provided with reasonable access to the management of the Corporation and CureVac NL for the purpose of due diligence by banks or potential investors, to the extent legally permitted. Section 30.1 shall apply accordingly.
- 22.8 Following the IPO and for as long as a Major Shareholder could be viewed as a "control person" within the meaning of applicable US securities laws, the Corporation or CureVac NL shall, if requested by a Major Shareholder, give such Major Shareholder access to drafts of SEC filings in connection with SEC reporting requirements, to the extent legally permitted and if and to the extent this is reasonably required by such Major Shareholder in its opinion to evaluate such Major Shareholder's potential liability exposure under applicable US laws and regulations. The Corporation or CureVac NL shall, upon reasonable request of a Major Shareholder, discuss and take into account such Major Shareholder's input to such SEC filings if and to the extent such input is in such Major Shareholder's opinion (i) directly related to its potential liability in connection with such filings and (ii) furnished within the Reaction Time Limit.
- 22.9 Prior to the IPO, the Corporation and/or CureVac NL shall enter into a registration rights agreement with any Major Shareholder pursuant to which the respective Major Shareholder shall, until 90 days after such time as that Major Shareholder or any of its Affiliates own less than 10% of any class of the Corporation's or CureVac NL's Shares, be granted by the Corporation or CureVac NL, as the case may be, customary registration rights for the resale of the respective Shares held by a Major Shareholder or any of its Affiliates pursuant to an effective registration statement. Such registration rights shall include, subject to customary conditions and exceptions, among other things:

- (a) three (3) demands for registration on an SEC Form F-1 or S-1, as applicable, which demands may be exercised upon the earlier to occur of (i) two years after the date hereof and (ii) six months after the IPO is consummated;
- (b) an unlimited number of demands by the respective Major Shareholder for registration on Form F-3 or S-3 (but up to three (3) such demands during any twelve (12) month period), as applicable, if the Corporation or CureVac NL is eligible to use such form for a registration statement;
- (c) piggyback registration rights to participate pro rata in any registration statement filed by the Corporation or CureVac NL for itself or another holder, other than a registration statement in connection with the IPO;
- (d) an undertaking by the Corporation and/or CureVac NL to use its reasonable best efforts to effect the registration so as to have the Registration Statement declared effective by the SEC and qualify the shares under any blue sky laws and bear all costs related thereto (other than any direct selling commission with respect to any shares placed in a sale pursuant to such registration);
- (e) in connection with such registration rights, for the Corporation and/or CureVac NL to take all actions reasonably necessary or advisable to facilitate the disposition of Shares by the respective Major Shareholder and its Affiliates, including causing appropriate officers and employees to be available for meetings with prospective investors in presentations, meetings and road shows and
- (f) customary indemnification by the Corporation and CureVac NL in favour of the respective Major Shareholder and its Affiliates with respect to any liabilities arising under securities laws for the sale of Shares and a reciprocal indemnity from the respective Major Shareholder to the Corporation or CureVac, as the case may be, with respect to the respective Major Shareholder's provision of information in respect of any such registration statement (i) identifying the respective Major Shareholder, (ii) the respective Major Shareholder's title to the Shares being registered and (iii) the respective Major Shareholder's intended method of distribution, provided that in each of (i)-(iii) the aggregate amount of the liability of the respective Major Shareholder and its Affiliates in connection with such indemnity shall not exceed its and their net proceeds from sale.

VII. EMPLOYEES AND MANAGEMENT

23. PARTICIPATION PLAN FOR EMPLOYEES AND MEMBERS OF THE MANAGEMENT BOARD

- 23.1 The Corporation has a virtual participation plan for members of the Management Board and other key employees (the “VESOP”) for a total of up to 60,175 participation rights corresponding (the “VESOP Total”) with 10% of the share capital of the Corporation as of 01 February 2015 in the amount of altogether EUR 601,750. Currently under the VESOP 60.175 virtual shares (*Beteiligungspunkte*) are issued.
- 23.2 The Parties are in agreement that other than mentioned above in Section 23.1 no further virtual shares and/or additional virtual option rights shall be issued under the VESOP.
- 23.3 The Parties further agree *inter partes* that economically any claims of any beneficiary under the VESOP of whatever kind (a “VESOP Entitlement”) shall be borne exclusively out of the shareholdings of the Existing Shareholders 2015 as set forth in this Section 23, as follows:
- (a) the economic burden of any VESOP Entitlement shall be borne exclusively by the Existing Shareholders 2015;
 - (b) the Investors shall at no time be liable for any costs or expenses associated with or resulting from any VESOP Entitlement;
 - (c) the Existing Shareholders 2015 shall exercise all their voting rights and other direct or indirect powers of control in respect of the Corporation to ensure that the respective shareholdings of the Investors are not diluted by any VESOP Entitlement and
 - (d) the Existing Shareholders 2015, the Corporation and CureVac NL take the common view that any amounts paid or shares provided to the Corporation or CureVac NL in settlement of their respective obligations hereunder shall be considered as a tax neutral contribution (*neutrale Einlage*) on the level of the Corporation and CureVac NL. The Existing Shareholders 2015, the Corporation and CureVac NL shall be obliged to observe this approach when preparing their respective individual tax returns and – if challenged by the respectively competent tax authorities – shall defend this approach until a final and binding assessment (*formell und materiell bestandskräftige Entscheidung*) has been received provided that, however, only if and to the extent the filing and perpetuation of such remedies are commercially reasonable. The Existing Shareholders 2015 shall not deduct any amounts paid or shares provided under this Section 23.3 from any tax base unless such deduction does not infringe the tax neutral treatment at the level of the Corporation and CureVac NL as stipulated in sentence 1 of this Section (d). The Existing Shareholders 2015 shall procure a respective treatment at the level of their Affiliates and related persons, as applicable.

For the purpose of this Section 23.3(d), BMGF's compliance as an Existing Shareholder 2015 shall be voluntary.

- 23.4 For this purpose, in case of an exercise event under the VESOP the Existing Shareholders 2015 shall transfer Shares up to the maximum amounts set forth below to the Corporation in order to enable the Corporation to fulfill the claims of the beneficiaries under the VESOP. For the avoidance of doubt, by transferring their relevant Shares up to the maximum amounts set forth below, the Existing Shareholders 2015 shall have fully met their obligations under this Section 23 and the Existing Shareholders 2015 shall not be required to make any additional payments or transfer any additional Shares to the Corporation.

Existing Shareholders 2015	Maximum number of Shares that will be transferred
Dievini	55,766
Dr. Hörr	789
Dr. von der Mülbe	573
Prof. Dr. Jung	240
Dr. Klein	179
Prof. Dr. von Bohlen und Halbach	169
Prof. Dr. Rammensee	136
Dr. Tanner	132
Bill & Melinda Gates Foundation	2,191

- 23.5 The Parties share the understanding that in case of a restructuring of the Corporation in preparation of an IPO (e.g., the transfer of the Shares to a foreign holding company in return for the issue of shares in that company as mentioned in Section 22.4) the obligation of the Existing Shareholders 2015 according to this Section 23.4 shall apply *mutatis mutandis* to the shares the Existing Shareholders 2015 receive in the course of such restructuring in return for the transfer of the Shares as defined in this Section 23.4. Notwithstanding Section 23.3(c) above, the number of Shares set forth above with respect to dievini and BMGF will be adjusted accordingly if BMGF has received from dievini 1/3 of the dievini Tranche II Series B Shares pursuant to Section 17.5(c) above.
- 23.6 The Shareholders agree to do everything necessary and possible so that the number of shares subject to a future participation plan (a “**New VESOP**”), being issued under the terms of such New VESOP are adapted to and shall at all times (unless otherwise approved by the shareholders meeting) be limited (together with the number of virtual shares issued under the VESOP) to 15% of the Corporation's or CureVac NL's share capital applicable following the Series B Capital Increase 2020, being EUR [174.210] (for the Corporation) less the VESOP Total. The additional (virtual) option rights that may be granted by increasing the amount of the virtual participation volume pursuant to sentence 1 of this Section 23.6 are intended for employees and members of the Management Board. The decision whether and to what extent this volume can and will be utilized is based on the sole and unfettered discretion of the Supervisory Board. An obligation by the Corporation to grant options therefrom will not be created; nor will there be any entitlement of the employees.

- 23.7 Any Share Transfers of the Existing Shareholders 2015 in order to fulfill their respective obligations in relation to the VESOP as set forth in this Section 23 shall be deemed a Permitted Transfer in accordance with Sections 17.1 and 17.3; for the avoidance of doubt; Sections 18 through 20 shall not apply to the Share Transfers set forth herein.
- 24. CONCENTRATION OF BUSINESS ACTIVITIES/NON-COMPETE OBLIGATION MANAGEMENT'S OBLIGATION TO PERFORM**
- 24.1 With respect to their shareholdings in the Corporation or CureVac NL, each of the Parties under no. 4 and no. 5 agrees that until he exits as employee, advisor, member of management, Management Board or Supervisory Board of the Corporation or CureVac NL, shall during such period of time not form any other companies or businesses in the field of the Corporation's Object of Business on his own or through third parties or take up any such participation on his own or through third parties or engage himself in any other way for such companies or businesses or persons except with the consent of a majority of Shareholders to be given on a case by case basis, which shall not be unreasonably withheld.
- 24.2 Subject to Section 24.7 the Parties under no. 4 and no. 5 are obliged for the duration of one (1) year calculated from the time they exit as employees, advisors, member of management, Management Board or Supervisory Board of the Corporation or CureVac NL, depending on which occurs later, that they will neither directly nor indirectly invest in a corporation in competition with the Corporation's Object of Business, or work for such companies.
- 24.3 If the Corporation or CureVac NL, as applicable, does not waive the post-contractual non-compete obligation set out in Section 24.2 in writing with respect to the exiting party within one (1) month after receipt/declaration of termination, the exiting Party will receive compensation in the amount of the most recently drawn compensation (*zuletzt bezogene vertragmäßigen Leistungen*) for the duration of the post-contractual non-compete provision. Any other revenue generated during this period is to be fully offset - except for investment income and social benefits. If this provision is legally impermissible, the amount of the compensation will be adjusted to the extent required. Related provisions on compensation are to be included in the employment or service contracts of the Managing Shareholder.
- 24.4 Restrictions on the non-commercial activity of the Founders as scientists are not associated with the above non-compete provisions.

- 24.5 Investment in listed companies and investment companies up to an investment level of 5% of the respective share capital of companies active in line of the Corporation's Object of Business do not fall under the non-compete provision in Sections 24.1 and 24.2. The Managing Shareholder and each of the Parties under no. 4, no. 7 and no. 8 represents (*garantieren*) to each Investor, dievini and BMGF that, as of the date of this Agreement, he does not hold any participation which would fall within Section 24.1.
- 24.6 The Parties under no. 4 und no. 5 undertake to the Investors, dievini and BMGF that during the aforementioned period they will publish materials in the Corporation's Object of Business only after the prior written consent of the Supervisory Board of the Corporation or CureVac NL.
- 24.7 Should any of the Parties under no. 4 and no. 5 breach the obligation in accordance with Sections 24.1 and 24.2 or the representation given in Section 24.5 ("**Other Business Activities**"), the Investors, dievini and BMGF shall be entitled to demand that the respective Party ceases his Other Business Activities and to claim damages so that the Corporation or CureVac NL is put in such position by the respective Party as it would have been in if the respective Party had not engaged in such Other Business Activities. In addition, the respective Party has to transfer any and all profit to the Corporation which he has either directly or indirectly received on his own or through a third party by such Other Business Activities.
- 24.8 Each of the Parties under no. 4 and no. 5, in addition to the above provisions, hereby irrevocably offers for sale to all holders of Series B Shares (including the Series B Investors 2020), in proportion to their shareholdings in the Corporation or CureVac NL, in the event of a violation of the non-compete provision, all Shares (including any attendant preferential rights) that the relevant Party (4 and/or 5) holds at a price equivalent to the amount invested by said Party in the Corporation up to that point in cash. In each case, the holders of Series B Shares can demand that the Shares offered to them be transferred to a third party named by them. The holders of Series B Shares may exercise these rights from this Section only if the corresponding violation of the non-compete provision is not stopped within a period of twenty (20) Banking Days despite a written (*Textform*) warning to the breaching Party.
- 24.9 The provisions of this Section 24 (with respect to the position of the Parties under no. 4 and no. 5 as Shareholders of the Corporation or CureVac NL) shall co-exist with non-compete obligations of the Parties under no. 4 and 5. under their respective service or employment agreements with the Corporation or as member of the Supervisory Board or the Management Board of the Corporation or CureVac NL but shall not lead to an extension of non-compete obligations of the Parties under no. 4 and 5 under their respective service or employment agreements with the Corporation or as member of the Supervisory Board or the Management Board of the Corporation or CureVac NL; for the avoidance of doubt, any compensation with regard to the non-compete obligation shall only be owed once – either on the basis of the employment or service contracts or on the basis of this Agreement.

25. ASSIGNMENT OF PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS

- 25.1 The Founders declare that they have already assigned to the Corporation all of their present intellectual property rights (including but not limited to inventions, patents, copyrights, trade secrets, trademarks, domain names, rights of use and exploitation etc.) (“**IP-Rights**”) related to the Corporation’s Object of Business.
- 25.2 The Managing Shareholder is obliged to inform the Corporation at the latest until the expiration of the respective employment or service agreement about, and upon demand of the Corporation to transfer to the Corporation, all IP-Rights arising from inventions made by him in the period between foundation of the Corporation and expiration of his respective employment or service agreement related to the Corporation’s Object of Business without any further consideration, if such IP-Rights can be used by the Corporation in the Corporation’s Object of Business, as far as this is admissible in the context of the applicable mandatory law (in particular with respect to the German law on employee inventions (*Gesetz über Arbeitnehmererfindungen*)).
- 25.3 The Parties under no. 4, no. 7 and no. 8 declare that they have already assigned to the Corporation (free of charge) their respective IP-Rights developed within the Corporation’s RNA vaccination division on or before 31 December 2015.
- 25.4 The Corporation shall bear any costs with respect to any transfer of the IP-Rights and/or the application for registration of such IP-Rights. Each Founder shall inform the Corporation with respect to such IP Rights or the coming into existence of such IP Rights.
- 25.5 If the Managing Shareholder or one of the Parties under no. 4, no. 7 and no. 8 wants to be released from the obligation described in Section 25.2 after expiration of the post-contractual non-compete provision (Section 24.2) (the “**Former Employee**”), the Former Employee will declare this to the Corporation. In that case, the Former Employee hereby offers his Shares for sale to each holder of Series B Shares *pro rata* (relative ownership in the Corporation’s or CureVac NL’s share capital). This offer is subject to the condition that the Corporation or CureVac NL is not yet listed on a stock exchange when the post-contractual non-compete provision expires. If a stock exchange listing then exists, the above offer will be void. Each holder of Series B Shares may accept the offer set out in sentence 2 of this Section 25.5 within one (1) month after the Former Employee has notified it accordingly. The holders of Series B Shares (including the Series B Investors 2020) are entitled to demand that the Shares be transferred to each of them *pro rata* (relative ownership in the Corporation’s or CureVac NL’s share capital) or to a Third Party.
- 25.6 Any further transfer obligation regarding IP-Rights which might result from corporate law or from an underlying service or employment agreement of the relevant Founder, Managing Shareholder or Party under no. 7 or no. 8 shall remain unaffected.

26. SANCTION OF THE OBLIGATION TO ASSIGN PATENTS AND INTELLECTUAL PROPERTY RIGHTS

In the event of a violation of the above obligations to assign IP-Rights pursuant to Section 25, each Shareholder is entitled to demand compensatory damages and the withholding and transfer of the profits generated by the breaches of contract to the Corporation, in addition to the stopping of the breaches of contract.

VIII. GENERAL

27. SCOPE; LEGAL SUCCESSION

- 27.1 The Parties shall endeavour to procure that all present and future shareholders of the Corporation and of CureVac NL are also parties to this Agreement for the duration of this Agreement. The Parties to this Agreement hereby grant every natural or legal entity that is (respecting the provisions set forth herein, in the Articles and in the Articles NL) entitled to purchase, to subscribe or to takeover Shares in the Corporation or CureVac NL an offer to become a party to this Agreement and – except for the Corporation (if shareholdings in the Corporation are concerned) and CureVac NL (if shareholdings in CureVac NL are concerned) – waive the receipt of the acceptance declaration pursuant to § 151 sentence 1 BGB or applicable comparable provisions under the Dutch law. All prospective future shareholders shall make the acceptance of this offer by written declaration in the form set forth in **Annex 27.1** hereto certified by a notary public (*notariell beglaubigte Annahmeerklärung*) to the Corporation (if shareholdings in the Corporation are concerned) or to CureVac NL (if shareholdings in CureVac NL are concerned) with effect for all Parties (an “**Accession Agreement**”) and the Corporation or CureVac NL, as applicable, shall inform the Shareholders without undue delay of such accession. The entering into this Agreement shall only take effect provided that it is not subject to any unreasonable conditions (for the avoidance of doubt, conditions may be reasonable, e.g. if a third party accedes to this Agreement under the condition precedent (*aufschiebende Bedingung*) that a lawful right of first refusal as set forth in the sale and purchase agreement by which such third party has purchased its Shares shall not be executed) and without amendment. In the event an acquirer of Shares is not willing to accede to this Agreement, the Shareholders shall not consent to the transfer, issuance to or takeover of Shares in the Corporation or CureVac NL by such acquirer.
- 27.2 Shares may be transferred with or without consideration by way of individual legal succession only if the acquirer has previously agreed to be bound by this Agreement according to Section 27.1 above. This applies equally to encumbrances on the Shares and the granting of third-party rights with respect to the Shares. For the avoidance of doubt, if a Shareholder transfers Shares, then the attendant preferential rights pursuant to Sections 21.2 and 21.3 will be considered as included in the assignment.

- 27.3 All rights and obligations arising under this Agreement shall commence for the Parties on the day of the legal validity of this Agreement. In this context, the Shareholders shall treat each other as if the Series B Capital Increase 2020 has already been registered with the commercial register as on this day. All rights and obligations of a Shareholder under this Agreement shall cease on the day on which the respective Shareholder ceases to be a shareholder of the Corporation or CureVac NL and all rights and duties of the withdrawing shareholder as set forth in this Agreement have been settled in full. If, at any time after signing of this Agreement, a meeting of the shareholders of the Corporation is held prior to the date on which the Series B Capital Increase 2020 has been registered with the Corporation's commercial register, the Corporation shall notify each Series B Investor 2020 of the proposed resolution and the notified Series B Investor 2020 shall inform the Corporation on the basis of the provisions set forth herein whether it would intend to vote for, against or abstain in respect of such resolution as if its name had been entered in the Corporation's share register (*Aktienregister*) as a holder of Shares in the Corporation. Following receipt of such notifications, the Existing Shareholders undertake to vote in respect of the resolution in such manner as to ensure that the vote on the resolution is the same as it would have been if all of the Shareholders had voted on the resolution.
- 27.4 In the event of death or insolvency of a Party, such event shall have no effect on the validity of this Agreement. For the avoidance of doubt, it is understood that this Agreement shall be legally effective and continued between the remaining Parties, the legal successor and or the administrator, as the case may be. The same shall apply in case this Agreement is terminated by one Shareholder. In this case this Agreement shall be legally effective and continued between the remaining Parties.
- 27.5 This Agreement shall be binding upon, and shall inure to the benefit of, the Parties hereto and their respective heirs, executors, administrators, successors, permitted assignees and other transferees, including Persons who purchase or receive Shares from a Shareholder, and the Parties hereto agree for themselves and their respective heirs, executors, administrators, successors, permitted assignees and other transferees to execute any instruments which may be necessary or proper to carry out the purposes and intent of this Agreement.
- 27.6 Notwithstanding any restrictions on the disposal of Shares under this Agreement, all Parties undertake to transfer their Shares (e.g., after termination of a trust agreement or upon intra group transfer) only to such person and/or legal entity who by written declaration towards the remaining parties undertakes to enter into all rights and obligations in accordance with this Agreement.

28. NO ASSIGNMENT OF RIGHTS AND OBLIGATIONS

Any single rights and/or single obligations (*e.g.*, payment obligations, information rights etc.) defined under this Agreement cannot be transferred or assigned in whole or in part without the prior written consent of the other Parties hereto, provided that dievini, BMGF and the Investors may assign such right without such consent to any Person to whom a transfer of Shares is unrestricted under this Agreement, e.g., in the case of dievini pursuant to Sections 17.5(a) and 17.5(c), in the case of BMGF pursuant to Section 17.5(b), and, to any transferee pursuant to a Permitted Transfer, and provided further that where such transfer is to more than one person or entity, such permitted Third Parties shall be joint and several creditors (*Gesamtgläubiger*) with respect to the rights under this Agreement and jointly and severally liable (*Gesamtschuldner*) with respect to the obligations under this Agreement. A consent to a share transfer given by the Shareholders shall concurrently be deemed as consent to the transfer of rights and/or obligations under this Agreement.

29. FOUNDERS' COVENANTS

- 29.1 Each Founder and the Parties under no. 9 and no. 10 covenant to the other Parties to obtain and maintain, by way of separate legally binding and effective agreements with their respective spouses, that such Founder or Party under no. 9 and no. 10 may act to comply with the Drag Along Right. In this regard each Founder shall specifically obtain the agreement from his spouse that he will not be restricted from disposing of his Shares (e.g., consent according to § 1365 German Civil Code (*BGB*) or applicable comparable provisions under the Dutch law). The Founders and the Parties under no. 9 and no. 10 shall also procure that their respective Shares are exempt from the statutory property regime of the community of surplus (*Zugewinnngemeinschaft*).
- 29.2 Each Founder and Party under no. 9 and no. 10 hereby covenant to inform the Supervisory Board of the Corporation or CureVac NL, as the case may be, in case of entering into any side-shareholders', voting, pool or similar agreement with other Founders or Party under no. 9 and no. 10 with respect to the exercise of voting rights from their respective Shares or the rights deriving from this Agreement except as otherwise stated herein.

30. CONFIDENTIALITY/SHARING OF INFORMATION

- 30.1 The Parties undertake to keep all information in this Agreement as well as the fact that the Party under no. 4. at the date of this Agreement is under legal guardianship (*Betreuung*) and will be represented by Dr. Sara Hoerr as his legal custodian (*Betreuerin*) in accordance with the judicial proceedings as conducted at the local court (*Amtsgericht*) Mitte (Berlin) under the case number (*Aktenzeichen*) 55 XVII 32/20 completely confidential. However, such information may be disclosed to or filed with
- (a) employees, directors and advisors and Affiliates (and to their employees, directors and advisors) of each Party who are subject to a corresponding duty of confidentiality on behalf of the other Parties but only on a strict need to know basis;

- (b) present and future investors or exit partners who directly or indirectly participate in the Corporation if they are subject to a non-disclosure or confidentiality agreement according to industry standards;
- (c) banks or other advisers in the course of the IPO of the Shares in the Corporation or CureVac NL;
- (d) tax and other authorities to the extent required by law or to fulfil information requests made by such authorities;
- (e) investors of the Investors, dievini and BMGF in the course of the internal reporting obligations of the Investors, dievini and BMGF provided that such investors are subject to a corresponding duty of confidentiality;
- (f) to the extent disclosure is required by a court or administrative order, applicable stock exchange rules, law or regulation or if it has been made with the consent of the holders of Series B Shares and the Management Board;
- (g) to the extent disclosure is required by any contract to which the Corporation is a party and that is listed on **Annex 30.1(g)** and
- (h) the SEC, NASDAQ, FINRA and any other securities exchange or regulatory authorities in connection with the IPO or subsequent securities offering by the Corporation or CureVac NL.

30.2 The Corporation and CureVac NL shall not disclose, and shall use commercially reasonable efforts to prevent any of the members of its Management Board or Supervisory Board of the Corporation and CureVac NL or the Corporation's employees or Shareholders from disclosing that the Corporation has any commercial arrangement with BMGF or any of its affiliates without first obtaining BMGF's prior written consent to the scope and content of such disclosure, except as otherwise required by applicable law.

30.3 In no event shall the Corporation or any Party to this Agreement make any public statement of any kind regarding BMGF's investment and / or the respective investments of the Series B Investors 2015 and / or the respective investments of the Series B Investors 2016 and / or the Series B Investor 2017 and / or Series B Investor 2019, and / or the Series B Investors 2020 in the Corporation or any commercial arrangement with BMGF and / or the respective Series B Investors 2015 and / or the respective Series B Investors 2016, and / or the Series B Investor 2017 and / or the Series B Investor 2019, and / or the Series B Investors 2020, as the case may be, or any of its respective Affiliates (including those specified in Section 17.3(c) above) without first obtaining BMGF's and / or the respective Series B Investor's 2015, Series B Investor's 2016, Series B Investor's 2017, Series B Investor's 2019, and Series B Investors 2020, as the case may be, prior written consent to the scope and content of any such statement.

31. TERM

- 31.1 This Agreement shall become effective on the day the last one of the Parties has signed the Agreement.
- 31.2 This Agreement shall remain in force for an indefinite period and may be terminated at the end of each half calendar year by any Shareholder only with the effect for such Shareholder but not for other Parties by giving three (3) months' notice, but for the first time on 31 December 2024.
- 31.3 The right to terminate this Agreement for cause (*Kündigung aus wichtigem Grund*) remains unaffected hereby.
- 31.4 Subject to Section 31.2, in the event of an IPO as per the day of the first listing of the Corporation's or CureVac NL's Shares with a Recognized Stock Exchange in accordance with this Agreement, the Agreement shall continue, but limited to the content of the following provisions: (i) Section 7.7; (ii) sharing of information which is mandatory for tax purposes set out in Section 7.9; (iii) Section 7.10; (iv) use of proceeds set out under Section 8(b); (v) Section 10; (vi) Section 13.3 (on the level of the Corporation for as long as the Corporation's Supervisory Board is obligatory); (vii) Sections 13.13 and 13.14; (viii) Sections 22.4(b) as well as 22.6 through 22.9; (ix) Sections 23.3 and 23.4; (x) Section 30; (xi) Sections 31.2 through 31.5, 31.7 and 31.8 as well as (xii) Section 32. Any lock-ups agreed to on the occasion of an IPO will be fully observed by all Parties.
- 31.5 If a Shareholder (i) exits the Corporation or CureVac NL (whichever occurs later) or (ii) terminates this Agreement in accordance with Sections 31.2 or 31.3 above, then the remaining Shareholders, the Corporation and CureVac NL will remain bound to this Agreement. Section 31.8 remains unaffected.
- 31.6 Notwithstanding the provision in Section 31.2 above, the Agreement will completely terminate (*Vollbeendigung*) in case of an Exit Event before the IPO after distribution of the proceeds in accordance with this Agreement and, in particular, Section 21. In such case, Sections 30, 31.7 and 32 shall survive.
- 31.7 Notwithstanding anything in this Agreement, in case of a termination of this Agreement (whether in whole or in part),
- (a) with respect to KfW or a KfW Affiliate (solely if and for as long as being a Shareholder of the Corporation or CureVac NL), Sections 7.7 and 13.3 shall continue to apply;
 - (b) until the consummation of the IPO or Exit Event, Section 18 shall continue to apply;

- (c) with respect to a Major Shareholder (as long as being a Major Shareholder), Sections 22.6 through 22.9 shall continue to apply and
- (d) the Corporation or CureVac NL, respectively, shall approve any Share Transfer requested by a Shareholder or a Shareholder's Affiliate to a Shareholder's Affiliate to the extent that the approval is required under either statute, the Articles, or the Articles NL, respectively,

provided that all provisions referenced in each of lit. (a) through (d) above as well as Sections 31.7 and 32 shall continue to bind the Corporation, CureVac NL and the Shareholders.

- 31.8 Any claims that have accrued during the term of this Agreement and not satisfied or discharged prior to the consummation of the IPO, the distribution of the proceeds following an Exit Event, the cessation or complete termination of this Agreement shall remain unaffected.

32. FINAL PROVISIONS

- 32.1 This Agreement (including the Annexes, which constitute a material part of the Agreement) contains all of the agreements between each and every of the Parties with regard to its subject-matter (except from the notarial transfer agreement between dievini and BMGF (deed no. 129/2015 of the notary Dr. Jochen Scheel, Frankfurt am Main) dated 15 July 2015) and – except from the notarial transfer agreement between dievini and BMGF (deed no. 129/2015 of the notary Dr. Jochen Scheel, Frankfurt am Main) dated 15 July 2015) – replaces all prior agreements and declarations (of all or of some) of the Parties with regard to this subject-matter. In particular, this Agreement replaces the Investment and Shareholders' Agreement. The Investment and Shareholders' Agreement is hereby cancelled, except for the provisions contained in the investment and shareholders' agreement dated 13 February 2015 as amended by amendment to the investment and shareholders' agreement dated 15 July 2015 under following sections: 8 (Legal Title Warranties), 9 (Business Warranties), 10 (Legal Consequences of Breach of Warranty), and except for the provisions contained in the investment and shareholders agreement dated 2 October 2015 under the following sections 4 (Legal Title Warranties), 5 (Business Warranties) and 6 (Legal Consequences of Breach of Warranty) as well as the provisions contained in the investment and shareholders agreement dated 14 October 2016, in the investment and shareholders agreement dated 13 October 2017 and in the investment and shareholders agreement dated 18 December 2019 under the following sections 4 (Legal Title Warranties), 5 (Business Warranties) and 6 (Legal Consequences of Breach of Warranty), and except for the provisions contained in the investment and shareholders agreement dated 18 December 2019 under sections 11.2 and 11.3 (Anti-Dilution And Downround Protection), or unless and to the extent not explicitly referred to otherwise herein.

- 32.2 Except where an amendment of or supplement to this Agreement requires notarization (in which case such amendment or supplement shall require the consent in notarial form of all Parties), amendments and supplements to this Agreement must be made in writing and require the consent by all Parties in order to be valid. This also applies to any waiver of the written-form requirement.
- 32.3 The Parties agree that any amendments to this Agreement that would adversely affect or eliminate the information and disclosure rights of any of SMI, Vanguard 1 and/or Vanguard 2 or eliminates the approval rights of any of SMI, Vanguard 1 and/or Vanguard 2 in this Agreement shall require the specific approval of SMI, Vanguard 1 and/or Vanguard 2, as the case may be. The provisions in Section 32.2 shall remain unaffected hereby.
- 32.4 The Parties agree that L-Bank – or its legal successors in accordance with this Agreement – shall have no obligation whatsoever to invest further funds into the Corporation or CureVac NL. The same shall apply *mutatis mutandis* to LBBW AM.
- 32.5 Internally between the Parties, the provisions of this Agreement shall take precedence over the provisions of the Articles and Articles NL in the event of a conflict between them.
- 32.6 This Agreement is subject to German law.
- 32.7 Any amount expressed in this Agreement in US Dollars (USD or \$) shall, to the extent that it requires, in whole or in part, to be expressed in Euros (EUR or €) in order to implement and/or give full effect to this Agreement, be deemed for that purpose to have been converted into Euros immediately before the close of business on the Banking Day immediately prior to the date of this Agreement. Subject to any applicable legal requirements governing conversions into that currency, the rate of exchange shall be European Central Bank's spot rate for the purchase of Euros with US Dollars at the time of the deemed conversion.
- 32.8 Any dispute, disagreement, controversy or claim arising out of or in connection with this Agreement or its Annexes or the transactions contemplated hereby or thereby shall be finally and exclusively settled in accordance with the Rules of Arbitration of the German Institution of Arbitration e.V. (*Deutsche Institution für Schiedsgerichtsbarkeit, DIS*) without recourse to the ordinary courts of law. The arbitral tribunal shall consist of three (3) arbitrators. The arbitration shall take place in Stuttgart (Germany). The arbitration shall be conducted in English and written evidence (*Beweismittel*) will be submitted in English.

- 32.9 In the event that applicable mandatory law requires any matter arising out of or in connection with this Agreement and its implementation to be decided by an ordinary court of law, the competent courts in Stuttgart (Germany) shall have the exclusive jurisdiction.
- 32.10 The Parties hereto acknowledge and agree, for the avoidance of doubt, that each Party may request injunctive relief (*vorläufiger Rechtsschutz - Arrest und einstweilige Verfügung*) with the competent ordinary courts of any jurisdiction.
- 32.11 Notwithstanding the provisions of Section 32.8 each Party hereto shall be entitled to issue a third party notice (*Streitverkündung*) to the other Party in the event that it has initiated or is otherwise involved in litigation with a third party or third parties before the ordinary courts of any jurisdiction in accordance with the procedural rules of the respective jurisdiction.
- 32.12 If and to the extent that the arbitral tribunal should, notwithstanding the choice of law provided for under Section 32.6, be required to resolve on any conflicts of law, such conflicts shall exclusively be resolved applying the rules on conflicts of law as set forth in articles 3 to 47 of the Introductory Act to the German Civil Code (*Einführungsgesetz zum Bürgerlichen Gesetzbuch – EGBGB*).
- 32.13 In the event any provision hereof is or shall become invalid or unenforceable, the validity of the other provisions shall remain unaffected. In lieu of the invalid or unenforceable provision, such valid and enforceable provision shall be deemed to be agreed upon which closely corresponds to the intended economic purpose of the invalid or unenforceable provision. The same shall apply to any supplementary interpretation (*ergänzende Vertragsauslegung*) of any of the terms of this Agreement.
- 32.14 In the event any provision hereof is or shall become invalid or unenforceable due to the fact that such provision is not included in the Articles, Articles NL or other corporate regulations, the Shareholders, the Corporation and CureVac NL shall take all actions required by law, the Articles, Articles NL, by-laws or other corporate regulations to validly implement such provision in the Articles, Articles NL or other corporate regulations.
- 32.15 The binding language of this Agreement shall be English (except as certain Annexes the binding language of which shall be German). If the English expression used herein is translated by a German or Dutch expression in brackets, the English expression shall be for convenience only.
- 32.16 Any notice or other declaration hereunder shall be in writing (including by telecopy), unless notarization or any other specific form is required under this Agreement, and shall become effective upon receipt by the recipient Party or otherwise expressly stipulated in this Agreement.

- 32.17 Each Party shall bear its own costs, except as otherwise set forth herein and except that the Corporation shall bear all costs regarding the consummation of this Agreement including all costs (including but not limited to any court fees) with respect to the registration of the Series B Capital Increase 2020 Shares with the Corporation's commercial register or the respective court. The foregoing shall apply *mutatis mutandis* with respect to any transfer tax (*Verkehrssteuern*).
- 32.18 The Parties are entitled to the rights under or in connection with this Agreement to the exclusion of any joint entitlement, i.e., in such a way that each relevant Party, as the case may be, may individually exercise the rights to which such relevant Party is entitled, unless otherwise expressly provided. Joint and several liability (*gesamtschuldnerische Haftung*) of the Parties, as the case may be, shall be explicitly excluded except as otherwise provided in this Agreement. In any case, none of the Investors shall on the basis of and in connection with this Agreement be subject to a joint and several liability (*gesamtschuldnerische Haftung*).

Tübingen, July 17, 2020

CureVac AG

By: /s/ Dr. Franz-Werner Haas

Name: Dr. Franz-Werner Haas

Title: acting CEO

By: /s/ Pierre Kemula

Name: Pierre Kemula

Title: CFO

Tübingen, July 17, 2020

CureVac B.V.

/s/ Franz-Werner Haas

Name: Dr. Franz-Werner Haas

Function: Managing Director

FORM OF REGISTRATION RIGHTS AGREEMENT

by and among

the Persons listed on Schedule A hereto,

and

CureVac N.V.

Dated as of [●], 2020

This REGISTRATION RIGHTS AGREEMENT, dated as of [●], 2020 (as it may be amended supplemented or otherwise modified from time to time, this “**Agreement**”), is made among CureVac N.V., a Dutch public limited liability company (*naamloze vennootschap*) incorporated under the law of the Netherlands (the “**Company**”) and the persons listed on Schedule A hereto (each such Person, a “**Holder**”). Capitalized terms used in this Agreement without definition have the meaning set forth in Section 1.

WITNESSETH:

WHEREAS, the Company and Holders are parties to the Investment Shareholder Agreement (as defined below) pursuant to which the Company agreed to provide each Holder certain registration rights with respect to the Company Shares (as defined below); and

WHEREAS, the Company desires to grant registration rights to the Holders on the terms and conditions set out in this Agreement;

NOW, THEREFORE, in consideration of the mutual promises made herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Certain Definitions.** As used herein, the following terms shall have the following meanings:

“**Additional Piggyback Rights**” has the meaning set forth in Section 2.2(c).

“**Affiliate**” means with respect to any Person, any other Person that directly or indirectly controls, is controlled by or is under common control with, such Person and with respect to (i) KfW also includes the Federal Republic of Germany and its special estates (*Sondervermögen*), corporate bodies (*Körperschaften*) and institutions (*Anstalten*) as well as their respective Affiliates, (ii) dievini Hopp BioTech holding GmbH & Co. KG (“**dievini**”), also includes (A) Mr. Dietmar Hopp or an entity that is the beneficial owner of dievini, determined as of the date hereof, (together “**Ultimate Beneficiary**”) (B) a member of the immediate family of an Ultimate Beneficiary referred to under clause (A) above, with “immediate family” meaning any family member by blood, marriage or adoption, not more remote than the first cousin, (C) an Affiliate of an Ultimate Beneficiary referred to under clause (A) above), including (i) Hopp LT Vermögensverwaltungs GmbH, registered with the commercial register of Mannheim, Germany, under HRB 724834, and (ii) trusts, foundations, or similar asset funds for the potential benefit of an Ultimate Beneficiary or the immediate family as referred to under clause (B), (D) an Affiliate of a member of the immediate family of an Ultimate Beneficiary referred to under clause (B) above or (E) members of the management board of dievini and/or its general partner and, for the avoidance of doubt, the dievini management board members Prof. Dr. Christof Hettich and Prof. Dr. Friedrich von Bohlen also as private individuals and, in each case, their respective Affiliates; *provided* that no Holder shall be deemed an Affiliate of any other Holder solely by reason of any investment in the Company or by its being a party to the Investment and Shareholders’ Agreement.

“**Agreement**” has the meaning set forth in the preamble.

“**Assign**” means to directly or indirectly sell, transfer, assign, distribute, exchange, pledge, hypothecate, mortgage, grant a security interest in, encumber or otherwise dispose of Registrable Securities, whether voluntarily or by operation of law, including by way of a merger. “**Assignor**,” “**Assignee**,” “**Assigning**” and “**Assignment**” have meanings corresponding to the foregoing.

“**Business Day**” means any day other than a Saturday, Sunday or day on which banking institutions in New York, New York or Frankfurt, Germany are authorized or obligated by law or executive order to close.

“**Company**” has the meaning set forth in the preamble.

“**Company Shares**” means common shares of the Company, par value €0.12 per share, and any and all securities of any kind whatsoever of the Company that may be issued by the Company after the date hereof in respect of, in exchange for, or in substitution of, Company Shares, pursuant to any stock dividends, splits, reverse splits, combinations, reclassifications, recapitalizations, reorganizations and the like occurring after the date hereof.

“**Company Shares Equivalents**” means, with respect to the Company, all options, warrants and other securities convertible into, or exchangeable or exercisable for (at any time or upon the occurrence of any event or contingency and without regard to any vesting or other conditions to which such securities may be subject) Company Shares or other equity securities of the Company (including, without limitation, any note or debt security convertible into or exchangeable for Company Shares or other equity securities of the Company).

“**Damages**” has the meaning set forth in Section 2.9(a).

“**Demand Exercise Notice**” has the meaning set forth in Section 2.1(a).

“**Demand Registration**” has the meaning set forth in Section 2.1(a).

“**Demand Registration Request**” has the meaning set forth in Section 2.1(a).

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

“**Expenses**” means any and all fees and expenses incident to the Company’s performance of or compliance with Article 2, including, without limitation: (i) SEC, stock exchange or FINRA, and all other registration and filing fees and all listing fees and fees with respect to the inclusion of securities on the Nasdaq Global Market or on any other securities market on which the Company Shares are listed or quoted, (ii) fees and expenses of compliance with state securities or “blue sky” laws of any state or jurisdiction of the United States or compliance with the securities laws of foreign jurisdictions and in connection with the preparation of a “blue sky” survey, including, without limitation, reasonable fees and expenses of outside “blue sky” counsel and securities counsel in foreign jurisdictions, (iii) word processing, printing and copying expenses, (iv) messenger and delivery expenses, (v) expenses incurred in connection with any road show, (vi) fees and disbursements of counsel for the Company, (vii) fees and disbursements of all independent public accountants (including the expenses of any audit and/or comfort letter and updates thereof), retained by the Company, (viii) fees and expenses payable to any Qualified Independent Underwriter, (ix) any other fees and disbursements of underwriters, if any, customarily paid by issuers or sellers of securities, including reasonable fees and expenses of counsel for the underwriters in connection with any filing with or review by FINRA (excluding, for the avoidance of doubt, any underwriting discount, commissions, or spread), (x) fees and expenses of any transfer agent or custodian, (xi) all internal expenses of the Company, (xii) reasonable and documented fees, out-of-pocket costs and expenses of the Participating Holders, including the reasonable fees and disbursements of one counsel for all of the Participating Holders participating in the offering selected by the Participating Holders holding a majority of the Registrable Securities to be sold for the account of all Participating Holders in the offering, *provided, however*, that all such fees, costs and expenses under this clause (xii) shall not exceed \$50,000 in the aggregate for all Participating Holders per registration pursuant to this Agreement and *provided, further*, that such fees, costs and expenses shall not include the payment of any underwriting commissions or discounts, and (xiii) expenses for securities law liability insurance of the Company and any rating agency fees.

“**FINRA**” means the Financial Industry Regulatory Authority, Inc.

“**Fully-Diluted Basis**” means, with respect to the Company Shares, all issued and outstanding Company Shares and all Company Shares issuable in respect of securities convertible into or exchangeable for such Company Shares, all stock appreciation rights, options, warrants and other rights to purchase or subscribe for such Company Shares or securities convertible into or exchangeable for such Company Shares, including any of the foregoing stock appreciation rights, options, warrants or other rights to purchase or subscribe for such Company Shares that are subject to vesting.

“**Holder**” or “**Holders**” has the meaning set forth in the preamble.

“**Indemnified Party**” has the meaning set forth in Section 2.9(c).

“**Indemnifying Party**” has the meaning set forth in Section 2.9(c).

“**Initiating Holder(s)**” has the meaning set forth in Section 2.1(a).

“**Investment and Shareholders’ Agreement**” means the Investment and Shareholders’ Agreement entered between the Company and several shareholders parties thereto dated July 17, 2020.

“**IPO**” means the first underwritten public offering of the ordinary shares of the Company to the general public pursuant to a registration statement filed with the SEC completed on or about the date of this Agreement.

“**Lock-Up Agreement**” means any agreement entered into by a Holder that provides for restrictions on the transfer of Registrable Securities held by such Holder.

“**Majority Participating Holders**” means the Participating Holders holding more than 50% of the Registrable Securities proposed to be included in offerings of Registrable Securities by such Participating Holders pursuant to Section 2.1 or Section 2.2.

“**Majority Holder(s)**” means any Holder that (i) owns or beneficially owns 10% or more of the then outstanding Company Shares, until 90 days after such Holder ceases to own or beneficially own at least 10% of such Company Shares and (ii) Mr. Dietmar Hopp and Affiliates, in particular DH-LT-Investments GmbH, for so long as Mr. Dietmar Hopp is an Affiliate of the Company considering the controlling situation of Mr. Dietmar Hopp as of the date of this Agreement.

“**Manager**” has the meaning set forth in Section 2.1(c).

“**Participating Holders**” means all Majority Holders of Registrable Securities, which are proposed to be included in any registration or offering of Registrable Securities pursuant to Section 2.1 or Section 2.2.

“**Person**” means any individual, corporation (including not-for-profit), general or limited partnership, limited liability company, joint venture, estate, trust, association, organization, governmental entity or agency or other entity of any kind or nature.

“**Piggyback Holders**” means the Majority Holders.

“**Piggyback Shares**” has the meaning set forth in Section 2.3(a)(iv).

“**Qualified Independent Underwriter**” means a “qualified independent underwriter” within the meaning of FINRA Rule 5121.

“**Registrable Securities**” means any Company Shares held of record or beneficially owned by the Majority Holders and/or any of their respective Affiliates, as applicable, at any time (including the underlying shares held as a result of the conversion or exercise of Company Shares Equivalents), whether now owned or acquired by the Holders and/or any of their respective Affiliates at a later time; *provided* that, as to any Registrable Securities held or beneficially owned by a particular Holder and/or any of their respective Affiliates, such securities shall cease to be Registrable Securities when (A) a registration statement with respect to the sale of such securities shall have been declared effective under the Securities Act and such securities shall have been disposed of in accordance with such registration statement, (B) such securities are eligible to be sold by such Holder in a single transaction in compliance with the requirements of Rule 144 under the Securities Act, as such Rule 144 may be amended (or any successor provision thereto).

“**Rule 144**” and “**Rule 144A**” have the meaning set forth in Section 4.2.

“**SEC**” means the U.S. Securities and Exchange Commission.

“**Section 2.3(a) Sale Number**” has the meaning set forth in Section 2.3(a).

“**Section 2.3(b) Sale Number**” has the meaning set forth in Section 2.3(b).

“**Securities Act**” means the United States Securities Act of 1933, as amended, and any successor thereto, and any rules and regulations promulgated thereunder, all as the same shall be in effect from time to time.

“**Subsidiary**” means any direct or indirect subsidiary of the Company on the date hereof and any direct or indirect subsidiary of the Company organized or acquired after the date hereof.

“**Transfer**” means, with respect to any Company Shares, (i) when used as a verb, to sell, assign, dispose of, exchange, pledge, mortgage, encumber, hypothecate or otherwise transfer, in whole or in part, any of the economic consequences of ownership of such Company Shares, whether directly or indirectly, or agree or commit to do any of the foregoing and (ii) when used as a noun, a direct or indirect sale, assignment, disposition, exchange, pledge, mortgage, encumbrance, hypothecation or other transfer, in whole or in part, of any of the economic consequences of ownership of such Company Shares or any agreement or commitment to do any of the foregoing. For the avoidance of doubt, a transfer, sale, exchange, assignment, pledge, hypothecation or other encumbrance or other disposition of an interest in any Holder, or direct or indirect parent thereof, all or substantially all of whose assets are, directly or indirectly, Company Shares shall constitute a “Transfer” of Company Shares for purposes of this Agreement. For the avoidance of doubt, a transfer, sale, exchange, assignment, pledge, hypothecation or other encumbrance or other disposition of an interest in any Holder, or direct or indirect parent thereof, which has substantial assets in addition to Company Shares shall not constitute a “Transfer” of Company Shares for purposes of this Agreement.

“Valid Business Reason” has the meaning set forth in Section 2.1(a)(iii).

2. Registration Rights.

2.1. *Demand Registrations.* (a) If the Company shall receive from any Majority Holder at any time on or following the earlier to occur of (a) 180 days after the closing of the IPO and (b) July 17, 2022, a written request that the Company file a registration statement with respect to all or a portion of the Registrable Securities (a “**Demand Registration Request**,” and the registration so requested is referred to herein as a “**Demand Registration**,” and the sender(s) of such request pursuant to this Agreement shall be known as the “**Initiating Holder(s)**”), then the Company shall, (i) within 10 Business Days of the receipt thereof, give written notice (the “**Demand Exercise Notice**”) of such request to all other Holders, and subject to the limitations of this Section 2.1, (ii) use its reasonable best efforts to file a Registration Statement in respect of such Demand Registration as soon as possible, but in no event later than 75 days of receipt of the request, and (iii) use its reasonable best efforts to effect, as soon as practicable, the registration under the Securities Act (including, without limitation, by means of a shelf registration pursuant to Rule 415 thereunder if so requested and if the Company is then eligible to use such a registration) of all Registrable Securities that the Holders request to be registered. Pursuant to this Section 2.1, the Company shall not be required in any event to effect more than three Demand Registrations on Form F-1 or S-1, as applicable, or three Demand Registrations of each Holder in any twelve month period in case of a shelf registration on Form F-3 or S-3, as applicable (pursuant to Rule 415 thereunder if so requested and if the Company is then eligible to use such a registration). However, the Company shall not be obligated to take any action to effect any Demand Registration:

(i) within three months after a Demand Registration pursuant to this Section 2.1 that has been declared or ordered effective;

(ii) during the period starting with the date 15 days prior to its good faith estimate of the date of filing of, and ending on a date 90 days after the effective date of, a Company-initiated registration (other than a registration relating solely to the sale of securities to directors of the Company pursuant to a stock option, stock purchase or similar plan or to an SEC Rule 145 transaction), *provided* that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to become effective;

(iii) where the anticipated offering price, before any underwriting discounts or commissions and any offering-related expenses, is equal to or less than \$35,000,000 with respect to a Demand Registration on Form F-1 or S-1 and \$15,000,000 with respect to a Demand Registration on Form F-3 or S-3, as applicable; *provided, however*, that if any Majority Holder demands to register at least one-third of all Registrable Securities beneficially owned by such Majority Holder and its Affiliates, this section 2.1(iii) shall not be applicable;

(iv) if the Company shall furnish to such Holders a certificate signed by the Chief Executive Officer of the Company stating that in the good faith judgment of the Company, any registration of Registrable Securities should not be made or continued (or sales under a shelf registration statement should be suspended) because (i) such registration (or continued sales under a shelf registration statement) would materially and adversely interfere with a proposal or plan by the Company to engage in (directly or indirectly through any of its Subsidiaries): a material acquisition or divestiture of assets; a merger, consolidation, tender offer, reorganization, offering of the Company's securities or similar material transaction; or a material financing or any other material business transaction with a third party or (ii) the Company is in possession of material non-public information, and has determined that the disclosure of such information is not in the Company's best interests (in either case of (i) or (ii), a "**Valid Business Reason**"), then (x) the Company may postpone filing a registration statement relating to a Demand Registration Request or suspend sales under an existing shelf registration statement until 10 Business Days after such Valid Business Reason no longer exists, but in no event for more than 90 days after the date the Company determines a Valid Business Reason exists and (y) in case a registration statement has been filed relating to a Demand Registration Request, if the Valid Business Reason has not resulted from actions taken by the Company, the Company may cause such registration statement to be withdrawn and its effectiveness terminated or may postpone amending or supplementing such registration statement until 10 Business Days after such Valid Business Reason no longer exists, but in no event for more than 90 days after the date the Company determines a Valid Business Reason exists; and the Company shall give written notice to the Participating Holders of its determination to postpone or withdraw a registration statement or suspend sales under a shelf registration statement and of the fact that the Valid Business Reason for such postponement, withdrawal or suspension no longer exists, in each case, promptly after the occurrence thereof; *provided, however*, that the Company shall not defer its obligation in this manner for more than 90 days in any 12 month period;

(v) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance;

Each Holder of Registrable Securities agrees that, upon receipt of any notice from the Company that the Company has determined to withdraw any registration statement pursuant to clause (iv) of this Section 2.1(a), such Holder will discontinue its disposition of Registrable Securities pursuant to such registration statement and, if so directed by the Company, will deliver to the Company (at the Company's expense) all copies, other than permanent file copies, then in such Holder's possession of the prospectus covering such Registrable Securities that was in effect at the time of receipt of such notice. If the Company shall have withdrawn or prematurely terminated a registration statement filed pursuant to a Demand Registration (whether pursuant to clause (iv) of this Section 2.1(a) or as a result of any stop order, injunction or other order or requirement of the SEC or any other governmental agency or court), the Company shall not be considered to have effected an effective registration for the purposes of this Agreement until the Company shall have filed a new registration statement covering the Registrable Securities covered by the withdrawn registration statement and such registration statement shall have been declared effective and shall not have been withdrawn. If the Company shall give any notice of withdrawal or postponement of a registration statement, the Company shall, not later than 10 Business Days after the Valid Business Reason that caused such withdrawal or postponement no longer exists (but in no event later than 180 days after the date of the postponement or withdrawal), use its reasonable best efforts to effect the registration under the Securities Act of the Registrable Securities covered by the withdrawn or postponed registration statement in accordance with Section 2.1 (unless the Initiating Holders shall have withdrawn such request, in which case the Company shall not be considered to have effected an effective registration for the purposes of this Agreement), and such registration shall not be withdrawn or postponed pursuant to clause (iv) of this Section 2.1(a).

(b)

(i) The Company, subject to Sections 2.3 and 2.6, shall include in a Demand Registration (x) the Registrable Securities of the Initiating Holders and (y) the Registrable Securities of any other Majority Holder of Registrable Securities, which shall have made a written request to the Company for inclusion in such registration pursuant to Section 2.2 (which request shall specify the maximum number of Registrable Securities intended to be disposed of by such Participating Holder) within 10 Business Days after the receipt of the Demand Exercise Notice.

(ii) The Company shall, as expeditiously as possible, but subject to the limitations set forth in this Section 2.1, use its reasonable best efforts to (x) effect such registration under the Securities Act (including, without limitation, by means of a shelf registration pursuant to Rule 415 under the Securities Act if so requested and if the Company is then eligible to use such a registration) of the Registrable Securities, which the Company has been so requested to register, for distribution in accordance with such intended method of distribution and (y) if requested by the Initiating Holder(s), obtain acceleration of the effective date of the registration statement relating to such registration.

(c) In connection with any Demand Registration, the Company shall select the underwriter(s), which underwriter or underwriters shall be reasonably acceptable to the Requesting Shareholder.

(d) If so requested by the Initiating Holder(s), the Company (together with all Majority Holders proposing to distribute their securities through such underwriting) shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company and the Initiating Holder(s).

(e) Any Majority Holder that intends to sell Registrable Securities by means of a shelf registration pursuant to Rule 415 thereunder, shall give the Company two Business Days' prior notice of any such sale.

2.2. *Piggyback Registrations.*

(a) If, at any time or from time to time the Company proposes or is required to register or commence an offering of any of its securities for its own account or otherwise (other than pursuant to registrations on Form F-4 or Form S-8 or any similar successor forms thereto) (including but not limited to the registrations or offerings pursuant to Section 2.1), the Company will:

(i) promptly give to each Piggyback Holder written notice thereof (in any event within 5 Business Days) prior to the filing of any registration statement under the Securities Act; and

(ii) include in such registration and in any underwriting involved therein (if any), all the Registrable Securities specified in a written request or requests, made within 5 Business Days after mailing or personal delivery of such written notice from the Company, by any of the Piggyback Holders, except as set forth in Sections 2.2(b) and 2.2(f), with the securities which the Company at the time proposes to register or sell to permit the sale or other disposition by the Piggyback Holders (in accordance with the intended method of distribution thereof) of the Registrable Securities to be so registered or sold, including, if necessary, by filing with the SEC a post-effective amendment or a supplement to the registration statement filed by the Company or the prospectus related thereto. There is no limitation on the number of such piggyback registrations pursuant to the preceding sentence which the Company is obligated to effect. No registration of Registrable Securities effected under this Section 2.2(a) shall relieve the Company of its obligations to effect Demand Registrations under Section 2.1 hereof.

(b) If the registration in this Section 2.2 involves an underwritten offering, the right of any Piggyback Holder to include its Registrable Securities in a registration or offering pursuant to this Section 2.2 shall be conditioned upon such Piggyback Holder's participation in the underwriting and the inclusion of such Piggyback Holder's Registrable Securities in the underwriting to the extent provided herein. All Piggyback Holders proposing to distribute their Registrable Securities through such underwriting shall (together with the Company) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company or the Initiating Holder(s) in the event of a registration or offering pursuant to Section 2.1.

(c) The Company, subject to 2.3 and 2.6, may elect to include in any registration statement and offering pursuant to demand registration rights by any Person, (i) authorized but unissued shares of Company Shares or Company Shares held by the Company as treasury shares and (ii) any other Company Shares which are requested to be included in such registration pursuant to the exercise of piggyback registration rights granted by the Company after the date hereof and which are not inconsistent with or more favorable than the rights granted in, or otherwise conflict with the terms of, this Agreement (“**Additional Piggyback Rights**”); *provided, however*, that such inclusion shall be permitted only to the extent that it is pursuant to, and subject to, the terms of the underwriting agreement or arrangements, if any, entered into by the Initiating Holders.

(d) Other than in connection with a Demand Registration, if, at any time after giving written notice of its intention to register or sell any equity securities and prior to the effective date of the registration statement filed in connection with such registration or sale of such equity securities, the Company shall determine for any reason not to register or sell or to delay registration or sale of such equity securities, the Company may, at its election, give written notice of such determination to all Piggyback Holders of record of Registrable Securities and (i) in the case of a determination not to register or sell, shall be relieved of its obligation to register or sell any Registrable Securities in connection with such abandoned registration or sale, without prejudice, however, to the rights of Holders under Section 2.1, and (ii) in the case of a determination to delay such registration or sale of its equity securities, shall be permitted to delay the registration or sale of such Registrable Securities for the same period as the delay in registering such other equity securities.

(e) Notwithstanding anything contained herein to the contrary, the Company shall, at the request of any Piggyback Holder, file any prospectus supplement or post-effective amendments and otherwise take any action necessary to include therein all disclosure and language deemed necessary or advisable by such Piggyback Holder if such disclosure or language was not included in the initial registration statement, or revise such disclosure or language if deemed necessary or advisable by such Piggyback Holder including filing a prospectus supplement naming the Piggyback Holders, partners, members and shareholders to the extent required by law. Any Piggyback Holder shall have the right to withdraw its request for inclusion of its Registrable Securities in any registration statement pursuant to this Section 2.2 without prejudice to the rights of such Holders under Section 2.1, by giving written notice to the Company of its request to withdraw; *provided, however*, that such request must be made in writing prior to the earlier of the execution by such Piggyback Holder of the underwriting agreement or the execution by such Piggyback Holder of the custody agreement with respect to such registration or as otherwise required by the underwriters.

(f) Notwithstanding anything in this Agreement to the contrary, the rights of any Piggyback Holder set forth in this Agreement shall be subject to any Lock-Up Agreement that such Piggyback Holder has entered into.

2.3. *Allocation of Securities Included in Registration Statement or Offering.*

(a) Notwithstanding any other provision of this Agreement, in connection with an underwritten offering initiated by a Demand Registration Request, if the Manager advises the Initiating Holders in writing that marketing factors require, or the SEC advises, as applicable, a limitation of the number of shares to be underwritten (such number, the “**Section 2.3(a) Sale Number**”) within a price range acceptable to the Initiating Holders, the Manager shall so advise all Piggyback Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the Company shall use its reasonable best efforts to include in such registration or offering, as applicable, the number of shares of Registrable Securities in the registration and underwriting as follows:

(i) first, all Registrable Securities requested to be included in such registration or offering by the Majority Holders thereof (including pursuant to the exercise of piggyback rights pursuant to Section 2.2); *provided, however*, that if such number of Registrable Securities exceeds the Section 2.3(a) Sale Number, the number of such Registrable Securities (not to exceed the Section 2.3(a) Sale Number) to be included in such registration shall be allocated among all such Holders requesting inclusion thereof in proportion, as nearly as practicable, to the respective amounts of Registrable Securities held by such Majority Holders at the time of filing of the registration statement or the time of the offering, as applicable.

(ii) second, if by the withdrawal of Registrable Securities by a Majority Holder, a greater number of Registrable Securities held by other Majority Holders may be included in such registration or offering (up to the Section 2.3(a) Sale Number), then the Company shall offer to all Holders who have included Registrable Securities in the registration or offering the right to include additional Registrable Securities in the same proportions as set forth in Section 2.3(a) (i).

(iii) third, to the extent that the number of Registrable Securities to be included pursuant to clauses (i) and (ii) of this Section 2.3(a) is less than the Section 2.3(a) Sale Number, and if the underwriter so agrees, any securities that the Company proposes to register or sell, up to the Section 2.3(a) Sale Number; and

(iv) fourth, to the extent that the number of securities to be included pursuant to clauses (i), (ii) and (iii) of this Section 2.3(a) is less than the Section 2.3(a) Sale Number, the remaining securities to be included in such registration or offering shall be allocated on a pro rata basis among all Persons requesting that securities be included in such registration or offering pursuant to the exercise of Additional Piggyback Rights (“**Piggyback Shares**”), based on the aggregate number of Piggyback Shares then owned by each Person requesting inclusion in relation to the aggregate number of Piggyback Shares owned by all Persons requesting inclusion, up to the Section 2.3(a) Sale Number.

(b) In a registration or offering made pursuant to Section 2.2 that involves an underwritten primary offering on behalf of the Company, which was initiated by the Company, if the Manager determines that marketing factors require a limitation of the number of shares to be underwritten (such number, the “**Section 2.3(b) Sale Number**”) in order for the sale of the securities to be within a price range acceptable to the Company, the Company shall so advise all Piggyback Holders whose securities would otherwise be registered and underwritten pursuant hereto, and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated as follows:

(i) first, all equity securities that the Company proposes to register for its own account;

(ii) second, to the extent that the number of securities to be included pursuant to clause (i) of this Section 2.3(b) is less than the Section 2.3(b) Sale Number, the remaining Registrable Securities (not to exceed the Section 2.3(b) Sale Number) to be included in the underwritten offering shall be allocated among all Holders requesting inclusion pursuant to exercise of rights under Section 2.2 in proportion, as nearly as practicable, to the respective amounts of Registrable Securities held by such Holders based on the number of Registrable Securities then owned by each such Holder requesting inclusion in relation to the aggregate number of Registrable Securities owned by all Holders requesting inclusion;

(iii) third, to the extent that the number of securities to be included pursuant to clauses (i) and (ii) of this Section 2.3(b) is less than the Section 2.3(b) Sale Number, the remaining securities to be included in such underwritten offering shall be allocated on a pro rata basis among all Persons requesting that securities be included in such registration pursuant to the exercise of Additional Piggyback Rights, based on the aggregate number of Piggyback Shares then owned by each Person requesting inclusion in relation to the aggregate number of Piggyback Shares owned by all Persons requesting inclusion, up to the Section 2.3(b) Sale Number.

(c) If any registration pursuant to Section 2.2 involves an underwritten offering by any Person(s) other than a Holder to whom the Company has granted registration rights which are not more favorable than or inconsistent with the rights granted in, or otherwise conflict with the terms of, this Agreement, the Manager (as selected by the Company or such other Person) shall advise the Company that, in its view, the number of securities requested to be included in such registration exceeds the number (the “**Section 2.3(c) Sale Number**”) that can be sold in an orderly manner in such registration within a price range acceptable to the Company, the Company shall include shares in such registration as follows:

(i) first, the shares requested to be included in such underwritten offering shall be allocated on a pro rata basis among such Person(s) requesting the registration and all Holders requesting that Registrable Securities be included in such registration pursuant to the exercise of piggyback rights pursuant to Section 2.2, based on the aggregate number of securities or Registrable Securities, as applicable, then owned by each of the foregoing requesting inclusion in relation to the aggregate number of securities or Registrable Securities, as applicable, owned by all such Holders and Persons requesting inclusion, up to the Section 2.3(c) Sale Number;

(ii) second, to the extent that the number of securities to be included pursuant to clause (i) of this Section 2.3(c) is less than the Section 2.3(c) Sale Number, the remaining shares to be included in such underwritten offering shall be allocated on a pro rata basis among all Persons requesting that securities be included in such registration pursuant to the exercise of Additional Piggyback Rights, based on the aggregate number of Piggyback Shares then owned by each Person requesting inclusion in relation to the aggregate number of Piggyback Shares owned by all Persons requesting inclusion, up to the Section 2.3(c) Sale Number; and

(iii) third, to the extent that the number of securities to be included pursuant to clauses (i) and (ii) of this Section 2.3(c) is less than the Section 2.3(c) Sale Number, the remaining shares to be included in such registration shall be allocated to shares the Company proposes to register for its own account, up to the Section 2.3(c) Sale Number.

(d) If any Piggyback Holder of Registrable Securities disapproves of the terms of the underwriting, or if, as a result of the proration provisions set forth in clauses (a), (b) or (c) of this Section 2.3, any Piggyback Holder shall not be entitled to include all Registrable Securities in a registration or offering that such Piggyback Holder has requested be included, such Piggyback Holder may elect to withdraw such Piggyback Holder's request to include Registrable Securities in such registration or offering or may reduce the number requested to be included; *provided, however*, that (x) such request must be made in writing, to the Company, Manager and, if applicable, the Initiating Holder(s), prior to the execution of the underwriting agreement with respect to such registration and (y) such withdrawal or reduction shall be irrevocable and, after making such withdrawal or reduction, such Piggyback Holder shall no longer have any right to include such withdrawn Registrable Securities in the registration as to which such withdrawal or reduction was made to the extent of the Registrable Securities so withdrawn or reduced, without prejudice, however, to the rights of Holders under Section 2.1.

2.4. *Registration Procedures.* If and whenever the Company is required by the provisions of this Agreement to use its reasonable best efforts to effect or cause the registration of any Registrable Securities under the Securities Act as provided in this Agreement, the Company shall, as expeditiously as possible (but, in any event, within 90 days after a Demand Registration Request in the case of Section 2.4(a) below) and, to the fullest extent permitted by applicable law, in connection with the Registration of the Registrable Securities and, where applicable, a takedown off of a shelf registration statement:

(a) prepare and file all filings with the SEC and FINRA required for the consummation of the offering, including preparing and filing with the SEC a registration statement on an appropriate registration form of the SEC for the disposition of such Registrable Securities in accordance with the intended method of disposition thereof, which registration form (i) shall be selected by the Company and (ii) shall, in the case of a shelf registration, be available for the sale of the Registrable Securities by the selling Holders thereof and such registration statement shall comply as to form in all material respects with the requirements of the applicable registration form and include all financial statements required by the SEC to be filed therewith, and the Company shall use its reasonable best efforts to cause such registration statement to become effective and remain continuously effective from the date such registration statement is declared effective until the earliest to occur (A) the first date as of which all of the Registrable Securities included in the registration statement have been sold or (B) a period of 180 days in the case of an underwritten offering effected pursuant to a registration statement other than a shelf registration statement and a period of three years in the case of a shelf registration statement (*provided, however*, that before filing a registration statement or prospectus or any amendments or supplements thereto, or comparable statements under securities or state "blue sky" laws of any jurisdiction, or any free writing prospectus related thereto, the Company will furnish to one counsel for the Piggyback Holders participating in the planned offering (selected by the Initiating Holder(s), or if there are no Initiating Holder(s), by the Majority Participating Holders) and to one counsel for the Manager, if any, copies of all such documents proposed to be filed (including all exhibits thereto), which documents will be subject to the reasonable review and reasonable comment of such counsel (*provided* that the Company shall be under no obligation to make any changes suggested by the Participating Holders);

(b) prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection therewith and such free writing prospectuses and Exchange Act reports as may be necessary to keep such registration statement continuously effective for the period set forth in Section 2.4(a) and to comply with the provisions of the Securities Act with respect to the sale or other disposition of all Registrable Securities covered by such registration statement;

(c) furnish, without charge, to each Participating Holder and each underwriter, if any, of the securities covered by such registration statement such number of copies of such registration statement, each amendment and supplement thereto (in each case including all exhibits), the prospectus included in such registration statement (including each preliminary prospectus and any summary prospectus), any other prospectus filed under Rule 424 under the Securities Act and each free writing prospectus utilized in connection therewith, in each case, in conformity with the requirements of the Securities Act, and other documents, as such seller and underwriter may reasonably request in order to facilitate the public sale or other disposition of the Registrable Securities owned by such seller (the Company hereby consenting to the use in accordance with all applicable law of each such registration statement (or amendment or post-effective amendment thereto) and each such prospectus (or preliminary prospectus or supplement thereto) or free writing prospectus by each such Participating Holder and the underwriters, if any, in connection with the offering and sale of the Registrable Securities covered by such registration statement or prospectus);

(d) use commercially reasonable efforts to register or qualify the Registrable Securities covered by such registration statement under such other securities or state "blue sky" laws of such jurisdictions as any sellers of Registrable Securities or any managing underwriter, if any, shall reasonably request in writing, and do any and all other acts and things which may be reasonably necessary or advisable to enable such sellers or underwriter, if any, to consummate the disposition of the Registrable Securities in such jurisdictions (including keeping such registration or qualification in effect for so long as such registration statement remains in effect), except that in no event shall the Company be required to qualify to do business as a foreign corporation in any jurisdiction where it would not, but for the requirements of this paragraph (e), be required to be so qualified, to subject itself to taxation in any such jurisdiction or to consent to general service of process in any such jurisdiction;

(e) promptly notify each Participating Holder and each managing underwriter, if any: (i) when the registration statement, any pre-effective amendment, the prospectus or any prospectus supplement related thereto, any post-effective amendment to the registration statement or any free writing prospectus has been filed and, with respect to the registration statement or any post-effective amendment, when the same has become effective; (ii) of any request by the SEC or state securities authority for amendments or supplements to the registration statement or the prospectus related thereto or for additional information; (iii) of the issuance by the SEC of any stop order suspending the effectiveness of the registration statement or the initiation of any proceedings for that purpose; (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification of any Registrable Securities for sale under the securities or state "blue sky" laws of any jurisdiction or the initiation of any proceeding for such purpose; (v) of the existence of any fact of which the Company becomes aware which results in the registration statement or any amendment thereto, the prospectus related thereto or any supplement thereto, any document incorporated therein by reference, any free writing prospectus or the information conveyed to any purchaser at the time of sale to such purchaser containing an untrue statement of a material fact or omitting to state a material fact required to be stated therein or necessary to make any statement therein not misleading; and, if the notification relates to an event described in clause (v), the Company shall promptly prepare and furnish to each such seller and each underwriter, if any, a reasonable number of copies of a prospectus supplemented or amended so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein in the light of the circumstances under which they were made not misleading;

(f) The Company shall otherwise use all commercially reasonable efforts to comply with all applicable rules and regulations of the SEC, and make available to its security holders, as soon as reasonably practicable, an earnings statement covering a period of 12 months, beginning within three months after the effective date of the registration statement (unless such report is filed pursuant to the Exchange Act), which earnings statement satisfies the requirements of Rule 158 under the Securities Act;

(g) The Company may request each Participating Holder promptly to furnish in writing to the Company (as the Company may reasonably request) information (i) identifying the respective Participating Holder, (ii) regarding the respective Participating Holder's title to the Shares being registered, (iii) regarding the respective Participating Holder's intended method of distribution of such the Registrable Securities, and (iv) any other information the Company reasonably believes, after consultation with counsel, is required in connection with such registration. In connection with a registration, any Participating Holder that does not provide such information within two Business Days of a request by the Company (which request is made before filing of the registration) may have its Registrable Securities excluded from such registration.

(h) (i) (A) cause all such Registrable Securities covered by such registration statement to be listed on the principal securities exchange on which similar securities issued by the Company are then listed (if any), if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (B) if no similar securities are then so listed, to cause all such Registrable Securities to be listed on a national securities exchange;

(i) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the Manager of such offering;

(j) provide and cause to be maintained a transfer agent and registrar for all such Registrable Securities covered by such registration statement not later than the effective date of such registration statement;

(k) use commercially reasonable efforts (i) to obtain an opinion from the Company's counsel and a comfort letter and updates thereof from the Company's independent public accountants who have certified the Company's financial statements included or incorporated by reference in such registration statement, in each case, in customary form and covering such matters as are customarily covered by such opinions and comfort letters (including, in the case of such comfort letter, events subsequent to the date of such financial statements) delivered to underwriters in underwritten public offerings, which opinion and letter shall be dated the dates such opinions and comfort letters are customarily dated and otherwise reasonably satisfactory to the underwriters, if any, and to the Initiating Holder(s) and the Majority Participating Holders, and (ii) furnish to each Participating Holder participating in the offering and to each underwriter, if any, a copy of such opinion and letter addressed to such underwriter;

(l) upon receipt of such confidentiality agreements as the Company may reasonably request, make reasonably available for inspection by counsel for each Participating Holder, by counsel for any underwriter participating in any disposition to be effected pursuant to such registration statement and by any accountant or other agent retained by any Participating Holder or any such underwriter, all pertinent financial and other records, pertinent corporate documents and properties of the Company, and cause all of the Company's officers, directors and employees to supply all information reasonably requested by any such counsel for a Participating Holder, counsel for an underwriter, accountant or agent in connection with such registration statement;

(m) use commercially reasonable efforts to prevent the issuance or obtain the prompt withdrawal of any order suspending the effectiveness of the registration statement, or the prompt lifting of any suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction, in each case, as promptly as reasonably practicable;

(n) use commercially reasonable efforts to make available its senior management, employees and personnel for participation in “road shows” and other marketing efforts and otherwise provide reasonable assistance to the underwriters (taking into account the reasonable needs of the Company’s businesses and the requirements of the marketing process) in marketing the Registrable Securities in any underwritten offering;

(o) furnish to counsel for each Participating Holder and to each managing underwriter, without charge, at least one signed copy of the registration statement and any post-effective amendments or supplements thereto, including financial statements and schedules, all documents incorporated therein by reference, the prospectus contained in such registration statement (including each preliminary prospectus and any summary prospectus), any other prospectus filed under Rule 424 under the Securities Act and all exhibits (including those incorporated by reference) and any free writing prospectus utilized in connection therewith;

(p) cooperate with the Participating Holders and the managing underwriter, if any, to facilitate the timely preparation and delivery of certificates not bearing any restrictive legends representing the Registrable Securities to be sold, and cause such Registrable Securities to be issued in such denominations and registered in such names in accordance with the underwriting agreement at least two Business Days prior to any sale of Registrable Securities to the underwriters or, if not an underwritten offering, in accordance with the instructions of the Participating Holders at least two Business Days prior to any sale of Registrable Securities and instruct any transfer agent and registrar of Registrable Securities to release any stop transfer orders in respect thereof;

(q) cooperate with any due diligence investigation by any Manager, underwriter or Participating Holder and make available such documents and records of the Company and its Subsidiaries that they reasonably request (which, in the case of the Participating Holder, may be subject to the execution by the Participating Holder of a customary confidentiality agreement in a form which is reasonably satisfactory to the Company);

(r) in connection with any underwritten offering, if at any time the information conveyed to a purchaser at the time of sale includes any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, promptly file with the SEC such amendments or supplements to such information as may be necessary so that the statements as so amended or supplemented will not, in light of the circumstances, be misleading.

If the Company files any shelf registration statement for the benefit of the holders of any of its securities other than the Majority Holders, the Company agrees that it shall include in such registration statement such disclosures as may be required by Rule 430B under the Securities Act (referring to the unnamed selling security holders in a generic manner by identifying the initial offering of the securities to the Holders) in order to ensure that the Majority Holders may be added to such shelf registration statement at a later time through the filing of a prospectus supplement rather than a post-effective amendment.

It shall be a condition precedent to the obligations of the Company to take any action pursuant to Sections 2.1, 2.2, or 2.3 that each Participating Holder shall furnish to the Company such information regarding themselves, the Registrable Securities held by them, and the intended method of disposition of such securities as the Company may from time to time reasonably request so long as such information is necessary for the Company to consummate such registration and shall be used only in connection with such registration.

If any such registration statement or comparable statement under state “blue sky” laws refers to any Holder by name or otherwise as the Holder of any securities of the Company, then such Holder shall have the right to require (i) the insertion therein of language, in form and substance satisfactory to such Holder and the Company, to the effect that the holding by such Holder of such securities is not to be construed as a recommendation by such Holder of the investment quality of the Company’s securities covered thereby and that such holding does not imply that such Holder will assist in meeting any future financial requirements of the Company, or (ii) in the event that such reference to such Holder by name or otherwise is not in the judgment of the Company, as advised by counsel, required by the Securities Act or any similar federal statute or any state “blue sky” or securities law then in force, the deletion of the reference to such Holder.

2.5. *Registration Expenses.* All Expenses incurred in connection with any registration, filing, qualification or compliance pursuant to Article 2 shall, to the fullest extent permitted by applicable law, be borne by the Company, whether or not a registration statement becomes effective or the offering is consummated. All underwriting discounts and all selling commissions relating to securities registered by the Participating Holders shall be borne by the holders of such securities pro rata in accordance with the number of shares sold in the offering by such Participating Holder.

2.6. *Certain Limitations on Registration Rights.* In the case of any registration under Section 2.1 pursuant to an underwritten offering, or, in the case of a registration under Section 2.2, if the Company has determined to enter into an underwriting agreement in connection therewith, all securities to be included in such registration shall be subject to the underwriting agreement and no Person may participate in such registration or offering unless such Person (i) agrees to sell such Person’s securities on the basis provided therein and completes and executes all reasonable questionnaires, and other documents (including custody agreements and powers of attorney) which must be executed in connection therewith; *provided, however*, that all such documents shall be consistent with the provisions hereof, (ii) provides such other information to the Company or the underwriter as may be necessary to register such Person’s securities; and (iii) cooperates with the Company’s reasonable requests in connection with such Registration (it being understood that the Company’s failure to perform its obligations hereunder, which failure is caused by such Holder’s failure to cooperate, will not constitute a breach by the Company of this Agreement).

2.7. *Limitations on Sale or Distribution of Other Securities.*

(a) Each Holder agrees, (i) to the extent requested in writing by a managing underwriter, if any, of any registration effected pursuant to Section 2.1 in which such Holder is selling Company Shares, not to sell, transfer or otherwise dispose of, including any sale pursuant to Rule 144 under the Securities Act, any Company Shares, or any other equity security of the Company or any security convertible into or exchangeable or exercisable for any equity security of the Company (other than as part of such underwritten public offering) during the time period reasonably requested by the managing underwriter, not to exceed 90 days and (ii) to the extent requested in writing by a managing underwriter of any underwritten public offering effected by the Company for its own account in which such Holder is selling Company Shares, not to sell any Company Shares (other than as part of such underwritten public offering) during the time period reasonably requested by the managing underwriter, which period shall not exceed 90 days subject to the same exceptions as provided in the lock-up provisions contained in the underwriting agreement for the IPO; and, if so requested, each Holder agrees to enter into a customary lock-up agreement with such managing underwriter.

2.8. *No Required Sale.* Nothing in this Agreement shall be deemed to create an independent obligation on the part of any Holder to sell any Registrable Securities pursuant to any effective registration statement. A Holder is not required to include any of its Registrable Securities in any registration statement, is not required to sell any of its Registrable Securities which are included in any effective registration statement, and may sell any of its Registrable Securities in any manner in compliance with applicable law even if such shares are already included on an effective registration statement.

2.9. *Indemnification.*

(a) The Company agrees to indemnify and hold harmless each Participating Holder beneficially owning any Registrable Securities covered by a registration statement, its officers, directors, employees, partners and agents, and each Person, if any, who controls such Participating Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act from and against any and all losses, claims, damages, liabilities and expenses (including reasonable expenses of investigation and reasonable attorneys' fees and expenses) (collectively, "**Damages**") caused by or relating to any untrue statement or alleged untrue statement of a material fact contained in any registration statement or prospectus relating to the Registrable Securities (as amended or supplemented if the Company shall have furnished any amendments or supplements thereto) or any preliminary prospectus or free writing prospectus, or caused by or relating to any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such Damages are caused by or related to any such untrue statement or omission or alleged untrue statement or omission so made based upon information furnished in writing to the Company by such Participating Holder or on such Participating Holder's behalf expressly for use therein; *provided* that, with respect to any untrue statement or omission or alleged untrue statement or omission made in any preliminary prospectus, or in any prospectus, as the case may be, the indemnity agreement contained in this Section 2.9(a) shall not apply to the extent that any Damages result from the fact that a current copy of the prospectus (or such amended or supplemented prospectus, as the case may be) was not sent or given to the Person asserting any such Damages at or prior to the written confirmation of the sale of the Registrable Securities concerned to such Person if it is determined that the Company has provided such prospectus to such Participating Holder and it was the responsibility of such Participating Holder to provide such Person with a current copy of the prospectus (or such amended or supplemented prospectus, as the case may be) and such current copy of the prospectus (or such amended or supplemented prospectus, as the case may be) would have cured the defect giving rise to such Damages. The Company also agrees to indemnify any underwriters of the Registrable Securities, their officers and directors and each Person who controls such underwriters within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act on substantially the same basis as that of the indemnification of the Participating Holders provided in this Section 2.9(a).

(b) Each Participating Holder holding Registrable Securities included in any registration statement agrees, severally but not jointly, to indemnify and hold harmless the Company, its officers, directors and agents and each Person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the indemnity from the Company to such Participating Holder provided in Section 2.9(a), but only (i) with respect to the information specified in Section 2.4(g) furnished in writing by such Participating Holder or on such Participating Holder's behalf expressly for use in any registration statement or prospectus relating to the Registrable Securities, or any amendment or supplement thereto, or any preliminary prospectus or free writing prospectus or (ii) to the extent that any Damages result from the fact that a current copy of the prospectus (or such amended or supplemented prospectus, as the case may be) was not sent or given to the Person asserting any such Damages at or prior to the written confirmation of the sale of the Registrable Securities concerned to such Person if it is determined that it was the responsibility of such Participating Holder to provide such Person with a current copy of the prospectus (or such amended or supplemented prospectus, as the case may be) and such current copy of the prospectus (or such amended or supplemented prospectus, as the case may be) would have cured the defect giving rise to such loss, claim, damage, liability or expense. Each such Participating Holder also agrees to indemnify and hold harmless the underwriters of the Registrable Securities, their officers and directors and each Person who controls such underwriters within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act on substantially the same basis as that of the indemnification of the Company provided in this Section 2.9(b). As a condition to including Registrable Securities in any registration statement filed in accordance with this Agreement, the Company may require that it shall have received an undertaking reasonably satisfactory to it from any underwriter to indemnify and hold it harmless to the extent customarily provided by underwriters with respect to similar securities. No Participating Holder shall be liable under this Section 2.9(b) for any Damages in excess of the net proceeds realized by such Participating Holder in the sale of Registrable Securities of such Participating Holder to which such Damages relate.

(c) If any proceeding (including any governmental investigation) shall be brought or asserted against any Person in respect of which indemnity may be sought pursuant to this Section 2.9, such Person (an “**Indemnified Party**”) shall promptly notify the Person against whom such indemnity may be sought (the “**Indemnifying Party**”) in writing and the Indemnifying Party shall assume the defense thereof, including the employment of counsel reasonably satisfactory to such Indemnified Party, and shall assume the payment of all fees and expenses; *provided* that the failure of any Indemnified Party so to notify the Indemnifying Party shall not relieve the Indemnifying Party of its obligations hereunder except to the extent that the Indemnifying Party is materially prejudiced by such failure to notify. In any such proceeding, any Indemnified Party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of such counsel, (ii) in the reasonable judgment of such Indemnified Party, representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them, including one or more defenses or counterclaims that are different from or in addition to those available to the Indemnifying Party, or (iii) the Indemnifying Party shall have failed to assume the defense within 60 days of notice pursuant to this Section 2.9(c). It is understood that, in connection with any proceeding or related proceedings in the same jurisdiction, the Indemnifying Party shall not be liable for the reasonable fees and expenses of more than one separate firm of attorneys at any time for all such Indemnified Parties, and that all such fees and expenses shall be reimbursed as they are incurred. In the case of any such separate firm for the Indemnified Parties, such firm shall be designated in writing by the Indemnified Parties. The Indemnifying Party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent, or if there be a final judgment for the plaintiff, the Indemnifying Party shall indemnify and hold harmless such Indemnified Parties from and against any loss or liability (to the extent stated above) by reason of such settlement or judgment. Without the prior written consent of the Indemnified Party, no Indemnifying Party shall effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Party is or could have been a party and indemnity could have been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from all liability arising out of such proceeding.

(d) If the indemnification provided for in this Section 2.9 is unavailable to the Indemnified Parties in respect of any Damages, then each Indemnifying Party, in lieu of indemnifying the Indemnified Parties, shall contribute to the amount paid or payable by such Indemnified Party, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions, statements or omissions that resulted in such Damages as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties’ relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Damages shall be deemed to include, subject to the limitations set forth in this Agreement, any reasonable attorneys’ or other reasonable fees or expenses incurred by such party in connection with any proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section 2.9, was available to such party in accordance with its terms. The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 2.9(d), were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section 2.9(d), no Participating Holder shall be required to contribute, in the aggregate, any amount in excess of the amount by which the proceeds actually received by such Participating Holder from the sale of the Registrable Securities subject to the proceeding exceeds the amount of any damages that such Participating Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission, except in the case of fraud by such Participating Holder. Each Participating Holder’s obligation to contribute pursuant to this Section 2.9(d), shall be several in the proportion that the proceeds of the offering received by such Participating Holder bears to the total proceeds of the offering received by all such Participating Holders and not joint. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. The indemnity and contribution agreements contained in this Section 2.9(d) are in addition to any liability that the Indemnifying Parties may have to the Indemnified Parties.

(e) *Other Indemnification.* Indemnification similar to that provided in this Section 2.9 (with appropriate modifications) shall be given by the Company and each Participating Holder participating therein with respect to any required registration or other qualification of securities under any foreign, federal or state law or regulation or governmental authority other than the Securities Act.

3. Underwritten Offerings.

3.1. *Underwriting Agreement in Underwritten Offerings.* If requested by the Manager for any underwritten offering, the Company shall enter into a customary underwriting agreement with the underwriters. Every Participating Holder shall be a party to such underwriting agreement; *provided, however,* that no Participating Holder shall be required to make any representations or warranties to the Company or the underwriters (other than representations and warranties regarding (i) such Participating Holder's ownership of Registrable Securities to be transferred free and clear of all liens, claims and encumbrances created by such Participating Holder, (ii) such Participating Holder's power and authority to effect such transfer, (iii) such matters pertaining to such Participating Holder's compliance with securities laws as reasonably may be requested and (iv) such Participating Holder's intended method of distribution and any written information specifically provided by such Participating Holder for inclusion in the registration statement) or to undertake any indemnification obligations to the Company with respect thereto, except as otherwise provided in Section 2.9 hereof.

4. General.

4.1. *Adjustments Affecting Registrable Securities.* The provisions of this Agreement shall apply, to the full extent set forth herein with respect to the Registrable Securities, to any and all shares of capital stock of the Company or any successor or assign of the Company (whether by merger, share exchange, consolidation, sale of assets or otherwise) which may be issued in respect of, in exchange for or in substitution of, Registrable Securities and shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof.

4.2. *Rule 144 and Rule 144A.* If the Company shall have filed a registration statement pursuant to the requirements of Section 12 of the Exchange Act or a registration statement pursuant to the requirements of the Securities Act in respect of the Company Shares or Company Shares Equivalents, the Company covenants that (i) so long as it remains subject to the reporting provisions of the Exchange Act, it will use reasonable best efforts to timely file the reports required to be filed by it under the Securities Act or the Exchange Act (including, but not limited to, the reports under Sections 13 and 15(d) of the Exchange Act referred to in subparagraph (c)(1) of Rule 144 under the Securities Act, as such Rule may be amended (“**Rule 144**”)) or, if the Company is not required to file such reports, it will, upon the request of any Majority Holder, make publicly available other information so long as necessary to permit sales by such Majority Holder under Rule 144, Rule 144A under the Securities Act, as such Rule may be amended (“**Rule 144A**”), or any similar rules or regulations hereafter adopted by the SEC, and (ii) it will take such further action as any Majority Holder may reasonably request, all to the extent required from time to time to enable such Holder to sell Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by (A) Rule 144, (B) Rule 144A or (C) any similar rule or regulation hereafter adopted by the SEC. Upon the request of any Majority Holder of Registrable Securities, the Company will deliver to such Majority Holder a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form F-3 (at any time after it so qualifies), a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and such other information as may be reasonably requested in availing any Majority Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form.

4.3. *Amendments and Waivers; Termination.* Any provision of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Majority Holders. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of Holders of Registrable Securities whose securities are being sold pursuant to a Registration Statement and that does not directly or indirectly affect the rights of other Holders of Registrable Securities may be given by Holders of at least two-thirds of the Registrable Securities being sold by such holders pursuant to such Registration Statement. Any amendment or waiver effected in accordance with the first sentence of this Section 4.3 shall be binding upon each Holder and the Company. Any waiver of any breach or default by any other party of any of the terms of this Agreement effected in accordance with this Section 4.3 shall not operate as a waiver of any other breach or default, whether similar to or different from the breach or default waived. No waiver of any provision of this Agreement shall be implied from any course of dealing between the parties hereto or from any failure by any party to assert its or his or her rights hereunder on any occasion or series of occasions.

4.4. If Registrable Securities are held by a nominee for the beneficial owner thereof, the beneficial owner thereof may, at its option, be treated as the Majority Holder of such Registrable Securities for purposes of any request or other action by any Majority Holder(s) of Registrable Securities pursuant to this Agreement (or any determination of any number or percentage of shares constituting Registrable Securities held by any Holder(s) of Registrable Securities contemplated by this Agreement); *provided, however*, that the Company shall have received evidence reasonably satisfactory to it of such beneficial ownership.

4.5. *Notices.*

(a) Unless otherwise specified herein, all notices, consents, approvals, reports, designations, requests, waivers, elections and other communications authorized or required to be given pursuant to this Agreement shall be in writing and shall be given, made or delivered (and shall be deemed to have been duly given, made or delivered upon receipt) by personal hand-delivery, by facsimile transmission or electronic mail (so long as receipt of such facsimile transmission or email is requested and received), by mailing the same in a sealed envelope, registered first-class mail, postage prepaid, return receipt requested, or by air courier guaranteeing overnight delivery, in each case addressed to the Company at the address set forth below or to the applicable Holder at the address indicated on Schedule A hereto (or at such other address for a Holder as shall be specified by like notice):

if to the Company, to it at:

CureVac N.V.
Friedrich-Miescher-Strasse 15, 72076
Tübingen, Germany
Attention: Franz-Werner Haas
E-mail: franz-werner.haas@curevac.com

with copies (which shall not constitute actual notice) to:

Davis Polk & Wardwell LLP
450 Lexington Avenue
New York, New York 10017
Attention: Richard D. Truesdell, Jr.
Facsimile: (212) 701-5674
E-mail: richard.truesdell@davispolk.com

(b) Any notice shall be deemed received on the date of receipt by the recipient thereof if received prior to 5:00 p.m. in the place of receipt and such day is a Business Day in the place of receipt. Otherwise, such Notice shall be deemed not to have been received until the next succeeding Business Day in the place of receipt.

4.6. *Successors and Assigns.*

(a) This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, successors, legal representatives and permitted assigns.

(b) A Majority Holder may Assign his, her or its rights under this Agreement without the Company's consent to an Assignee of Registrable Securities which (i) is with respect to any Majority Holder, the spouse, parent, sibling, descendant, niece or nephew of such Majority Holder, or the spouse or descendant thereof, and any trust, limited liability company, limited partnership, private foundation or other estate planning vehicle for such Majority Holder or for the benefit of any of the foregoing or other persons pursuant to the laws of descent and distribution, or (ii) is a legatee, executor or other fiduciary pursuant to a last will and testament of the Holder or pursuant to the terms of any trust which take effect upon the death of the Holder. In addition, any Holder may Assign his, her or its rights under this Agreement without the Company's prior written consent so long as such Assignment (i) occurs in connection with the transfer of all, but not less than all, of such Majority Holder's Registrable Securities in a single transaction in the case of such an Assignment by a Majority Holder and results in an Assignment to a single Assignee who is an Affiliate of such Majority Holder or (ii) occurs in connection with a transaction where the recipient of such Registrable Securities will become immediately after the transaction a Majority Holder of Registrable Securities (for purposes of determining whether a transferee is a Majority Holder under this clause (ii), the Company Shares owned or beneficially owned by such transferee shall be deemed to include those of its Affiliates). For the avoidance of doubt, if a Holder assigns rights under this clause and remains a Majority Holder himself, herself or itself, such assigning Holder shall continue to have the rights and obligations under this Agreement as long as he, she or it is a Majority Holder. Subject to subsection (c) below, any Assignment shall be conditioned upon prior written notice to the Company identifying the name and address of such Assignee and any other material information as to the identity of such Assignee as may be reasonably requested, and Schedule A hereto shall be updated to reflect such Assignment.

(c) Notwithstanding anything to the contrary contained in this Section 4.6, any Holder may elect to transfer all or a portion of its Registrable Securities to any third party without Assigning its rights hereunder with respect thereto, *provided* that in any such event all rights under this Agreement with respect to the Registrable Securities so transferred shall cease and terminate.

4.7. *Limitations on Subsequent Registration Rights.* From and after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public, the Company may, without the prior written consent of the Holders, enter into any agreement with any holder or prospective holder of any securities of the Company which provides such holder or prospective holder of securities of the Company comparable, but not conflicting, registration rights granted to the Holders hereby.

4.8. *Entire Agreement.* This Agreement and the other agreements referenced herein and therein constitute the entire agreement among the parties hereto with respect to the subject matter hereof, and supersede any prior agreement or understanding among them with respect to the matters referred to herein.

4.9. *Governing Law; Waiver of Jury Trial; Jurisdiction.*

(a) *Governing Law.* This Agreement is governed by and will be construed in accordance with the laws of the State of New York, excluding any conflict-of-laws rule or principle (whether of New York or any other jurisdiction) that might refer the governance or the construction of this Agreement to the law of another jurisdiction.

(b) *Waiver of Jury Trial.* EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVE ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIONS OF THE PARTIES HERETO IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT THEREOF. The Company or any Holder may file an original counterpart or a copy of this Section 4.9(b) with any court as written evidence of the consent of any of the parties hereto to the waiver of their rights to trial by jury.

(c) *Jurisdiction.* Each of the parties hereto (i) consents to submit itself to the personal jurisdiction of the courts of the State of New York located in the county and city of New York in the event any dispute arises out of this Agreement or any of the transactions contemplated by this Agreement, (ii) agrees that it will not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from such court, (iii) agrees that it will not bring any action relating to this Agreement or any of the transactions contemplated by this Agreement in any court other than the courts of the State of New York located in the county and city of New York and (iv) to the fullest extent permitted by law, consents to service being made through the notice procedures set forth in Section 4.5. Each party hereto hereby agrees that, to the fullest extent permitted by law, service of any process, summons, notice or document by U.S. registered mail to the respective addresses set forth in Section 4.5 shall be effective service of process for any suit or proceeding in connection with this Agreement or the transactions contemplated hereby.

4.10. *Interpretation; Construction.*

(a) The headings herein are for convenience of reference only, do not constitute part of this Agreement and shall not be deemed to limit or otherwise affect any of the provisions hereof. Where a reference in this Agreement is made to a Section, such reference shall be to a Section of this Agreement unless otherwise indicated. Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation.”

(b) The parties have participated jointly in negotiating and drafting this Agreement. In the event that an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provision of this Agreement.

4.11. *Counterparts.* This Agreement may be executed (including by facsimile transmission or other electronic signature of this Agreement signed by such party (via PDF, TIFF, JPEG or the like)) with counterpart pages or in one or more counterparts, each of which shall be deemed an original and all of which shall, taken together, be considered one and the same agreement, it being understood that both parties need not sign the same counterpart. The words “execution,” “signed,” “signature,” “delivery” and words of like import in or relating to this Agreement or any document to be signed in connection with this Agreement shall be deemed to include electronic signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act, and the parties hereto consent to conduct the transactions contemplated hereunder by electronic means

4.12. *Severability.* In the event that any provision of this Agreement shall be invalid, illegal or unenforceable, such provision shall be construed by limiting it so as to be valid, legal and enforceable to the maximum extent provided by law and the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

4.13. *Specific Performance.* It is hereby agreed and acknowledged that it will be impossible to measure the money damages that would be suffered if the parties fail to comply with any of the obligations imposed on them by this Agreement and that, in the event of any such failure, an aggrieved party will be irreparably damaged and will not have an adequate remedy at law. Each party hereto shall, therefore, be entitled (in addition to any other remedy to which such party may be entitled at law or in equity) to injunctive relief, including specific performance, to enforce such obligations, without the posting of any bond, and if any action should be brought in equity to enforce any of the provisions of this Agreement, none of the parties hereto shall raise the defense that there is an adequate remedy at law.

4.14. *Independent Nature of Holders' Obligations and Rights.* The obligations of each Holder hereunder are several and not joint with the obligations of any other Holder hereunder, and no Holder shall be responsible in any way for the performance of the obligations of any other Holder hereunder. Nothing contained herein or in any other agreement or document delivered at any consummation of securities pursuant hereto, and no action taken by any Holder pursuant hereto or thereto, shall be deemed to constitute the Holders as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Holders are in any way acting in concert with respect to such obligations or the transactions contemplated by this Agreement. Each Holder shall be entitled to protect and enforce its rights, including the rights arising out of this Agreement, and it shall not be necessary for any other Holder to be joined as an additional party in any proceeding for such purpose.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

COMPANY

CureVac N.V.

By: _____
Name:
Title:

[Signature Page to Registration Rights Agreement]

HOLDERS:

Dievini Hopp BioTech holding GmbH & Co. KG

By: _____

Kreditanstalt für Wiederaufbau

By: _____

DH-LT-Investments GmbH

By: _____

[Signature Page to Registration Rights Agreement]

SCHEDULE A

<u>Party</u>	<u>Address</u>
Dievini Hopp BioTech holding GmbH & Co. KG	dievini Hopp BioTech holding GmbH & Co KG Johann-Jakob-Astor-Str. 57 D-69190 Walldorf Germany
Kreditanstalt für Wiederaufbau (“KfW”)	Palmengartenstrasse 5-9 60325 Frankfurt am Main Federal Republic of Germany
DH-LT-Investments GmbH	Opelstraße 28, 68789 St. Leon-Rot, Germany, registered with the commercial register of Mannheim under HRB 732866

REDACTED

Certain identified information, indicated by [*****], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

COLLABORATION AND LICENSE AGREEMENT

dated

19 DECEMBER, 2019

by

CUREVAC AG
("CureVac")

and

GENMAB B.V.
("Genmab")

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COLLABORATION AND LICENSE AGREEMENT

between

CUREVAC AG

And

GENMAB B.V.

This COLLABORATION AND LICENSE AGREEMENT (“**Agreement**”) is effective as of the 19th of December, 2019 (“**Effective Date**”) and is entered into by and between:

CUREVAC AG, a German corporation, having a place of business at Paul-Ehrlich-Strasse 15, 72076 Tübingen, Germany

on the one side;

and

GENMAB B.V., KvK No. 3016 9902, a Dutch corporation, having a place of business at Uppsalalaan 15, 3584 CM Utrecht, the Netherlands

on the other side.

INTRODUCTION

- A. WHEREAS, CureVac is a biotechnology company that is a pioneer and technology leader in messenger ribonucleic acid (“**mRNA**”) based therapeutic approaches and especially discovers, designs and optimizes first-in-class mRNA therapies for, *inter alia*, the treatment of oncological diseases with unmet medical need.
- B. WHEREAS, Genmab is a pharmaceutical company and has expertise and intellectual property relating to the identification, design and optimization of recombinant antibodies and validated proprietary antibody technologies, including the DuoBody[®] platform, HexaBody[®] and HexaBody[®] related platforms and other antibody-engineering platforms for, *inter alia*, the generation of bispecific antibodies and antibodies with enhanced effector functions.
- C. WHEREAS, the Parties wish to collaborate in (i) the further development of one mRNA- encoded antibody designed to express Genmab’s proprietary [*****] and (ii) the generation of preclinical data packages for up to four (4) other Product candidates from which a maximum of three (3) could be selected for further development and commercialization by Genmab; all such products incorporating (a) CureVac’s mRNA technology; (b) monoclonal, bispecific and/or multispecific antibodies (or combination of antibodies) proprietary to Genmab; and (c) a selected lipid nanoparticle (LNP) delivery technology.

D. WHEREAS, CureVac wishes to grant to Genmab an exclusive license to the product referenced under (C)(i); and exclusive options for exclusive licenses to the products referenced under (C)(ii) above; provided that CureVac wishes to retain certain opt-in rights for up to one (1) of the products referenced under (C)(ii) that is a Cocktail Product (as defined below).

NOW THEREFORE, in consideration of the foregoing premises and the following mutual covenants and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS.

For purposes of this Agreement, the following capitalized terms shall have the following meanings, whether used in the singular or plural:

1.1 “**Acuitas License**” shall mean licenses available to CureVac at the Effective Date under the Development and Option Agreement made between Curevac and Acuitas Therapeutics Inc. dated April 29, 2016 and amended as of December 1, 2016 relating to LNP Technology owned by Acuitas.

1.2 “**Affiliate**” shall mean any corporation or other entity that controls, is controlled by, or is under common control with a Party. A corporation or other entity will be regarded as under the control of another corporation or entity if the latter corporation or entity owns or directly or indirectly controls fifty percent (50%) or more of the voting stock or other ownership interest of the former corporation or other entity, or if the latter corporation or entity possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of the former corporation or other entity or the power to elect or appoint more than fifty percent (50%) of the members of the governing body of the former corporation or other entity, *provided, however,* that regarding CureVac, Affiliate shall not include Mr. Dietmar Hopp, dievini Hopp BioTech holding GmbH & Co.KG and/or any other companies controlled by Mr. Dietmar Hopp and/or dievini Hopp BioTech holding GmbH & Co.KG that are not subsidiaries of CureVac. For avoidance of doubt, the term “Affiliate” shall include CureVac’s subsidiary company currently called CureVac Real Estate GmbH.

1.3 “**Agreement**” shall have the meaning set forth in the Preamble.

1.4 “**Alliance Manager**” shall have the meaning set forth in Section 9.1.1.

- 1.5 “**Antibody**” shall mean a molecule, defined by its amino acid sequence, including an engineered molecule that comprises one (1) or more immunoglobulin variable domains or functional parts of such domains. [*****] shall be considered one and the same Antibody; *provided, however*, that any such [*****]. For clarity, an “**Antibody**” can be a [*****]. The maximum number of Targets that a single Antibody can bind to is [*****]. For purposes of this Agreement, and unless otherwise set forth herein, Antibody shall include an Antibody Combination, as applicable.
- 1.6 “**Antibody Combination**” shall mean a combination of [*****] Antibodies and so binding to a maximum of [*****] distinct Targets.
- 1.7 “**Applicable Laws**” shall mean all applicable provisions of all national, supranational regional, state and local, laws, treaties, statutes, rules, regulations, directives, administrative codes, ordinances, decrees, orders, decisions, guidance documents, injunctions, awards, judgments, and permits of or from any court, arbitrator, stock exchange, regulatory authority or governmental authority having jurisdiction over or related to the subject item.
- 1.8 “**Arcturus License**” shall mean licenses available to CureVac at the Effective Date under the Development and Option Agreement made between Curevac and Arcturus Therapeutics Inc. dated January 1, 2018 and amended as of May 3, 2018, as of September 28, 2018 and as of July 24, 2019 relating to LNP Technology owned by Arcturus.
- 1.9 “**Assigning Party**” shall have the meaning set forth in Section 7.8.2.
- 1.10 “**Assigned Invention**” shall have the meaning set forth in Section 11.4.
- 1.11 “**Background Technology**” shall mean the CureVac Background Technology and/or Genmab Background Technology, as applicable.
- 1.12 “**Breaching Party**” shall have the meaning set forth in Section 15.4.
- 1.13 “**BioNTech License**” shall mean the non-exclusive license made between CureVac and BioNTech AG dated [*****] granting BioNTech certain non-exclusive rights under [*****] listed in **Exhibit 1.13**. For the purposes of this Agreement, the term “BioNTech License” shall not include any amendments made to the non-exclusive license agreement between CureVac and BioNTech AG after the Effective Date.
- 1.14 “**BLA**” shall mean (i) a Biologic License Application or New Drug Application submitted and filed with the FDA (or successor regulatory agency) necessary for approval of a drug or biologic in connection with the commercial sale or use of such drug or biologic in conformance with Applicable Laws and regulations in the United States or (ii) the equivalent application submitted to another Regulatory Agency including a Marketing Authorization Application (“**MAA**”).

- 1.15 “**Business Day**” shall mean any day other than Saturday, Sunday, or any day that banks are authorized or required to be closed in Tübingen, Germany or Utrecht, the Netherlands.
- 1.16 “**Calendar Quarter**” shall mean each successive period of three (3) months ending on March 31, June 30, September 30 and December 31 of each Calendar Year; provided, that the first Calendar Quarter under this Agreement will be the period beginning on the Effective Date and ending on the end of the Calendar Quarter in which the Effective Date is encompassed and the last Calendar Quarter of the Term will be the period beginning on January 1, April 1, July 1 or October 1, as applicable, and ending on the effective date of expiration or termination of this Agreement.
- 1.17 “**Calendar Year**” shall mean each successive period of twelve (12) months commencing on January 1 and ending on December 31; *provided, however,* that the first Calendar Year under this Agreement will be the period beginning on the Effective Date and ending on the end of the Calendar Year in which the Effective Date is encompassed and the last Calendar Year of the Term will be the period beginning on January 1 and ending on the effective date of expiration or termination of this Agreement.
- 1.18 “**CDO**” shall mean Chief Development Officer (or equivalent C-level manager) of each Party.
- 1.19 “**CDR**” shall mean complementarity-determining regions.
- 1.20 “**Change of Control**” shall mean, with respect to CureVac, (i) the sale or disposition to a Third Party of all or substantially all of the assets of CureVac to which the subject matter of this Agreement relates (including as part of the sale or disposition to a Third Party of all or substantially all of the assets of CureVac); (ii) the acquisition by a single Third Party, or two (2) or more Third Parties acting in concert, of beneficial ownership of fifty percent (50%) or more of the shares in CureVac; or (iii) the acquisition, merger or consolidation of CureVac with or into another Person, other than, in the case of this definition, an acquisition or a merger or consolidation of CureVac in which the holders of shares of voting capital stock of CureVac, immediately prior to such acquisition, merger or consolidation will beneficially own, directly or indirectly, at least fifty percent (50%) of the shares of voting capital stock of the acquiring Third Party or the surviving entity in such acquisition, merger or consolidation, as the case may be, immediately after such acquisition, merger or consolidation.
- 1.21 “**Clinical Phase I Study**” shall mean a clinical study of a product as further defined in 21 CFR §312.21(a) or the non-United States equivalent thereof. A Clinical Phase I Study is a clinical study in humans, the primary objective of which is to determine preliminary safety in healthy volunteers or patients. Such clinical study may also have secondary objectives, including tolerability, pharmacological activity or pharmacokinetics and preliminary efficacy parameters and may therefore be regarded as a phase I/II clinical trial. For the purposes of this Agreement, (i) the term Clinical Phase I Study shall also cover such phase I/II clinical trial; and (ii) at the point in such study when the cohort is expanded beyond the original phase I/II design so that the study becomes prospectively designed to generate sufficient data (if successful) to commence a Pivotal Study, a Clinical Phase II Study shall be deemed to have commenced.

- 1.22 “**Clinical Phase II Study**” shall mean a clinical study in humans of the safety, dose ranging and efficacy of a product, which is prospectively designed to generate sufficient data (if successful) to commence Pivotal/Clinical Phase III Studies, as further defined in 21 CFR §312.21(b) or (or the non-United States equivalent thereof).
- 1.23 “**Clinical Phase III Study**” shall mean a controlled, and usually multicenter, clinical study in humans of the efficacy and safety of a product, which is prospectively designed to demonstrate statistically whether such product is effective and safe for use in humans in the indication being investigated in a manner sufficient to submit a BLA to obtain Regulatory Approval to market such product, as further defined in 21 CFR §312.21(c) (or the non-United States equivalent thereof).
- 1.24 “**Clinical Studies**” shall mean all Clinical Phase I Studies, Clinical Phase II Studies and Clinical Phase III Studies, including Pivotal Studies.
- 1.25 “**CMC Development**” shall mean all research and development activities conducted in respect of the Manufacture of Products, including chemistry, manufacturing and control (CMC), creation of master and working cell banks, test method development and stability testing, process development, manufacturing scale-up, qualification and validation, quality assurance and quality control processes and techniques.
- 1.26 “**CMO**” shall mean a contract manufacturing organization.
- 1.27 “**Cocktail Product**” shall mean a Product that is designed to express a Program Antibody Combination.
- 1.28 “**CoGs**” shall mean the total cost of Manufacture of a unit of Product and shall include **Direct Cost, Indirect Cost** and **Pass-Through Cost** as defined below:
- 1.28.1 “**Direct Costs**” within CoGs shall include:
- (i) direct labor costs, based on the actual hours consumed by manufacturing and facility personnel charged at an average hourly wage rate which is designed to approximate actual cost for each employee’s position; and
 - (ii) direct labor fringe benefit costs, including, without limitation, compensation expense (other than wages included in direct labor cost in paragraph (i), payroll taxes and benefits allocated based on a proportionate percentage of direct labor costs charged to the manufacture of the Product to total actual plant-wide labor costs.

1.28.2 “**Indirect Costs**” within CoGs shall include:

- (i) facility and occupancy cost including, without limitation, rent, site insurance, depreciation, electricity and water charges, other services, waste removal, such cost to be allocated pro-rata to (i) the percent time-utilization of the manufacturing line in the Calendar Year out of the total time the manufacturing line is potentially capable of being utilized (including idle time); and (ii) the percent occupancy represented by the manufacturing line to the total plant;
- (ii) the cost of plant support services, which includes quality control, process sciences, quality assurance and validation services and being labor, payroll taxes and fringe benefit costs, allocated to the cost of supplies based on the proportion of actual labor hours consumed in relation to the Manufacture of the supplies to total actual labor hours consumed on all of the Products being Manufactured in the plant; and
- (iii) the cost of allocable overhead, being an amount added to an item of cost to reflect central or other overhead costs incurred by a Party or for its account including overhead costs attributable to the operation by it of its information systems, payroll, purchasing, supervisory and other internal groups being such costs normally allocated by such Party to its departments or project groups based on space occupied or headcount or other activity-based method consistently applied. Allocable overhead shall not include costs for general corporate activities including, by way of example only, investor relations, business development, legal affairs, human resources and finance, and any other activities not supporting activities conducted under this Agreement.

1.28.3 “**Pass-Through Costs**” within CoGs shall include the actual invoiced amounts paid by a Party to a CMO, excluding recoverable taxes such as VAT, and cost of materials and supplies for Manufacturing Product, based on actual costs including any applicable freight, taxes, duties, customs or import fees, less any discounts or free goods.

1.29 “**Collaboration Committee**” shall have the meaning set forth in Section 9.8.

1.30 “**Collaboration Target**” shall mean a Target in relation to which the Parties have agreed to seek to Develop a Product under this Agreement. For purposes of this Agreement, and unless otherwise set forth herein, Collaboration Target shall include Collaboration Target Combinations, the First Collaboration Target, the Replacement Target, the Reserved Targets, and the Optioned Targets, as applicable.

1.31 “**Collaboration Target Combination**” shall mean a Target Combination in relation to which the Parties have agreed to seek to Develop a Product under this Agreement. For purposes of this Agreement, and unless otherwise set forth herein, Collaboration Target Combination shall include Reserved Target Combinations, and Optioned Target Combinations, as applicable.

1.32 “**Combination Product**” shall mean:

- (i) a single pharmaceutical formulation containing as its active pharmaceutical ingredients both the active ingredients licensed hereunder and one or more other therapeutically or prophylactically active pharmaceutical ingredients;

- (ii) any combination therapy comprised of the Product and one or more other therapeutically or prophylactically active products, that is (i) priced and sold in a single package containing such multiple products; or (ii) packaged separately but sold together for a single price; or
- (iii) a product comprised of a Product and a companion or complementary diagnostic, priced and sold in a single package containing such multiple products or packaged separately but sold together for a single price;

in each case, including all dosage forms, formulations, presentations, line extensions, and package configurations.

1.33 “**Commercialization**” shall mean any and all activities directed to the preparation for sale of, offering for sale of, or sale of a Product, including activities related to marketing, promoting, distributing, importing and exporting such Products, interacting with Regulatory Agencies regarding any of the foregoing and medical affairs functions. For the avoidance of doubt, “Commercialization” shall not include the Manufacture of Products. When used as a verb, to “**Commercialize**” and “**Commercializing**” shall mean to engage in Commercialization, and “**Commercialized**” has a correlative meaning.

1.34 “**Commercialization Agreement**” shall mean the meaning set forth in Section 7.7.

1.35 “**Commercially Reasonable Efforts**” shall mean, with respect to a Party, those efforts, expertise and resources commensurate with efforts, expertise and resources commonly used in the biotechnology industry by a company of comparable size in connection with the development, manufacture and/or commercialization of a comparable pharmaceutical product which is of similar market potential at a similar stage of development or commercialization in light of issues of safety and efficacy, product profile, the competitiveness of the marketplace, the proprietary position of the compound or product, the regulatory structure involved, the profitability of the applicable products, product reimbursement, and other relevant factors such as technical, legal, scientific, or medical factors. For purposes of clarity, Commercially Reasonable Efforts will be determined on a country-by-country basis within the Territory, and it is anticipated that the level of effort may be different for different countries and may change over time, reflecting changes in the status of such product and the country(ies) involved.

1.36 “**Confidential Information**” shall mean all Know-How, Development Data or other information of a Party whether or not marked confidential or proprietary, including:

- (i) all communications between the Parties or information of whatever kind whether recorded or not and, if recorded, in whatever medium, relating to or arising out of this Agreement, whether disclosed prior to or after entering into this Agreement; and
- (ii) all copies and excerpts of the communications, information, notes, reports and documents in whatever form referred to in paragraph (i) of this definition.

For purposes of the confidentiality obligations set forth herein, (a) Genmab Know-How, Genmab Materials and Genmab Inventions shall be deemed Confidential Information of Genmab; and CureVac Know-How, CureVac Materials and CureVac Inventions (to the extent not incorporated in any Genmab Inventions) shall be deemed Confidential Information of CureVac; (b) Confidential Information jointly owned by the Parties shall be deemed Confidential Information of both Parties; and (c) the terms and conditions of this Agreement shall be deemed Confidential Information of both Parties (and both Parties shall be deemed the Receiving Party with respect thereto). “**Confidential Information**” also includes all information exchanged between the Parties pursuant to the Confidentiality Agreements and Material Transfer Agreement. Without limiting the foregoing, all Know-How and Development Data generated under this Agreement that is specific to a Genmab Invention, Genmab Other Invention, Collaboration Target, Collaboration Target Combination, Program Antibody, Program Antibody Combination, an mRNA construct expressing a Program Antibody or Program Antibody Combination, and/or Product shall be deemed the Confidential Information of Genmab. All Know-How and CMC Development data generated under this Agreement that is specific to any CureVac Invention or CureVac Other Invention shall, to the extent such CureVac Invention or CureVac Other Invention is not incorporated in any Genmab Invention, be considered Confidential Information of CureVac.

- 1.37 “**Confidentiality Agreements**” shall mean Confidentiality Agreement No. 1 and Confidentiality Agreement No. 2.
- 1.38 “**Confidentiality Agreement No. 1**” shall mean that certain Mutual Confidentiality and Nondisclosure Agreement entered into between the Parties as of October 10, 2016.
- 1.39 “**Confidentiality Agreement No. 2**” shall mean that certain Mutual Confidentiality and Nondisclosure Agreement entered into between the Parties as of 12 April 2018.
- 1.40 “**Control**” shall mean, with respect to any material, information or intellectual property right, that a Party (i) owns such material, information or intellectual property right; or (ii) has a license to or right to use or grant access to such material, information or intellectual property right, in each case of (i) or (ii), without violating the terms of any agreement or other arrangement with a Third Party.
- 1.41 “**Co-Promote**” shall mean, with respect to the Co-Promotion Territory, to promote a Product through Genmab’s and CureVac’s respective sales forces under a single trademark in such Co-Promotion Territory. “**Co-Promotion**” shall have a correlative meaning.
- 1.42 “**Co-Promotion Agreement**” shall have the meaning as set forth in Section 8.2.
- 1.43 “**Co-Promotion Committee**” shall have the meaning set forth in Section 8.2(i).
- 1.44 “**Co-Promotion Product**” shall have the meaning set forth in Section 8.1.
- 1.45 “**Co-Promotion Territory**” shall have the meaning as set forth in Section 8.1.

- 1.46 “**Co-Promotion Territory Commercialization Plan**” shall have the meaning as set forth in Section 8.2(iii).
- 1.47 “**Cover**” shall mean, with respect to a claim of a Patent Right, that such claim would be infringed, absent a license, by the Development, Manufacture or Commercialization of a Product.
- 1.48 “**CRO**” shall mean a contract research organization.
- 1.49 “**CureVac Alliance Manager**” shall have the meaning set forth in Section 9.1.1.
- 1.50 “**CureVac Background Technology**” shall have the meaning set forth in Section 11.1.
- 1.51 “**CureVac Co-Promotion Option**” shall have the meaning set forth in Section 8.1.
- 1.52 “**CureVac Indemnified Parties**” shall have the meaning set forth in Section 14.1.
- 1.53 “**CureVac Invention**” shall have the meaning set forth in Section 11.3.2.
- 1.54 “**CureVac Know-How**” shall mean all Know-How within the CureVac Background Technology and all Know-How, including Know-How comprised in the CureVac Manufacturing Technology, Controlled by CureVac or its Affiliates arising or generated during the Research Period in connection with the performance of activities under this Agreement, in including performance of activities under the R&D Plans (to be determined on a Collaboration Target-by-Collaboration Target basis) that is required for the Parties to Develop the Programs and/or to Develop, Manufacture and Commercialize Products under this Agreement, *provided, however*, that CureVac Know-How does not include (i) Know-How included in the LNP Technology; (ii) Know-How included in CVCMS; (iii) Know-How included in the Other Technologies; and (iv) Know-How that may be Controlled by CureVac in the future as a result of a Change of Control; i.e., that was Developed by a Third Party prior to such Change of Control, or by CureVac after the Change of Control, and is fully or partly based on technology Controlled by a Third Party prior to such Change of Control. CureVac Know-How shall also include Know-How related to CureVac Inventions and other Know-How generated by CureVac under a Program. The CureVac Know-How as so defined existing at the Effective Date is further described in **Exhibit 1.54**.
- 1.55 “**CureVac Manufacturing Technology**” shall mean Patent Rights and Know-How Controlled by CureVac or its Affiliates (including CureVac Real Estate GmbH even if it does not remain an Affiliate) related to CMC Development and/or the Manufacture of Products actually used in the CMC Development and/or Manufacture of a Product by or on behalf of CureVac and/or its Affiliates during the Development and/or Manufacture of such Product under an R&D Plan during the Research Period. For the avoidance of doubt, such CureVac Manufacturing Technology shall be licensed to Genmab for all subsequent Products under this Agreement no matter whether CureVac or its Affiliates (or their approved subcontractor or approved CMO) Manufactures the particular Product.

- 1.56** “**CureVac Materials**” shall mean any compounds, assays or other materials that are disclosed or otherwise made available by or on behalf of CureVac and/or its Affiliate(s) to Genmab hereunder for the purposes of this Agreement, including the compounds, assays, negative and positive mRNA control constructs (excluding, for clarity, any Product) and other materials set forth on **Exhibit 5.1.1**, and progeny, modifications or derivatives thereof that do not include use of Genmab Materials.
- 1.57** “**CureVac Other Invention**” shall have the meaning set forth in Section 11.3.3.
- 1.58** “**CureVac Other Invention Patent Right**” shall have the meaning set forth in Section 11.7.4
- 1.59** “**CureVac Patent Right(s)**” shall mean (i) all Patent Rights within the CureVac Background Technology Controlled by CureVac or its Affiliates as of the Effective Date; and (ii) all CureVac Program Patent Rights, CureVac Other Invention Patent Rights and CureVac’s interest in Joint Patent Rights that (in case of each of (i) and (ii)) are required for the Development of the Programs and/or for the Development, Manufacture and Commercialization of Products (including Product candidates under the research license) under the Agreement; and (iii) all Patent Rights within the CureVac Manufacturing Technology to the extent not within (i) or (ii); and (iv) any New Patent Rights that Genmab notifies CureVac it desires to include pursuant to Section 2.9. *provided, however*, that CureVac Patent Rights do not include (i) Patent Rights included in the LNP Technology or the Patent Rights referred to in Section 1.63 (Definition of CVCM); (ii) Patent Rights included in the Other Technologies; and (iii) Patent Rights that may be Controlled by CureVac in the future as a result of a Change of Control; i.e., that were Developed by a Third Party prior to such Change of Control. The CureVac Patent Rights as of the Effective Date are listed in **Exhibit 1.59**. For avoidance of doubt, the CureVac Patent Rights shall include any future Patent Rights Controlled by CureVac or its Affiliates that claim priority from any of the patents and patent applications listed in **Exhibit 1.59**.
- 1.60** “**CureVac Program Patent Right**” shall mean a Program Patent Right owned by CureVac, as set forth in Section 11.3 below, that Covers a CureVac Invention.
- 1.61** “**CureVac Project Leader**” shall have the meaning set forth in Section 9.1.2.
- 1.62** “**CureVac Technology**” shall mean CureVac Patent Rights, CureVac Inventions, CureVac Other Inventions, CureVac Know-How, CureVac Manufacturing Technology (to the extent not within the foregoing) and Third Party IP that is deemed to be CureVac Technology pursuant to Section 2.8.
- 1.63** “**CVCM**” shall mean CureVac’s next generation mRNA delivery vehicle, also referred to as CureVac Carrier Molecule™, which is disclosed in CureVac’s patent families [*****], that is appropriate for formulation of an mRNA construct.

- 1.64 “**Development**” shall mean all research, non-clinical, and clinical testing and drug development activities conducted in respect of the Collaboration Targets, Program Antibodies and Products, including those necessary or reasonably useful or otherwise requested or required by a Regulatory Authority as a condition or in support of obtaining or maintaining Regulatory Approvals and to successfully Develop, Manufacture and Commercialize the Products for use in the Field. “**Development**” shall include CMC Development, delivery system development, non-clinical testing, mechanism studies, toxicology, pharmacokinetics, clinical studies, regulatory affairs activities, statistical analysis and report writing, submission of documents, market research, pharmacoeconomic studies, and epidemiological/real world data studies. Development shall mean both (a) non-clinical and clinical Development; and (b) CMC Development. “**Develop**” and “**Developed**” have a correlative meaning.
- 1.65 “**Development Data**” shall mean (i) reports of non-clinical studies and Clinical Studies, (ii) CMC Development data; and (iii) all other documentation containing or embodying any non-clinical or clinical data relating to the Collaboration Targets, Program Antibodies and the Products or the use of the Products in the Field, such data in each case (i), (ii) and (iii) required for the Development and Commercialization of the Products, including but not limited to, registration dossiers.
- 1.66 “**Disclosing Party**” shall have the meaning set forth in Section 13.1
- 1.67 “**Disclosure Letter**” shall have the meaning set forth in Section 14.4.
- 1.68 “**Early Clinical Supply Agreement**” shall have the meaning set forth in Section 6.1.
- 1.69 “**Effective Date**” shall have the meaning set forth in the Preamble.
- 1.70 “**FDA**” shall have the meaning set forth in the definition of Regulatory Agency.
- 1.71 “**Field**” shall mean any and all uses for the prophylaxis or treatment of human conditions and diseases.
- 1.72 “**Financial Partner**” shall have the meaning set forth in Section 13.4.1(vi) below.
- 1.73 “**First Collaboration Program**” shall mean the Program addressing the First Collaboration Target and First Program Antibody, as described in the First Program Research Plan.
- 1.74 “**First Collaboration Target**” shall mean the target named [*****]. For purposes of this Agreement, and unless otherwise set forth herein, First Collaboration Target shall include the Replacement Target, as applicable.
- 1.75 “**First Commercial Sale**” shall mean, on a Product-by-Product and country-by-country basis, the first sale by Genmab or its Affiliates or Sublicensees or subcontractors to, such as but not limited to, a Third Party wholesaler, pharmacy, outpatient clinic, inpatient clinic, hospital, or dispensing physician in a given country after necessary Regulatory Approval has been granted with respect to such Product in such country. For avoidance of doubt, any sale of a Product by Genmab to an Affiliate or Sublicensee or subcontractor is not a First Commercial Sale.

- 1.76** “**First Composition of Matter Patent Rights**” shall mean, Product-by-Product, all Patent Rights within the first “composition of matter” Genmab Program Patent Rights (i.e. Genmab Program Patent Rights where the earliest priority date is the same) that Cover and claim the specific composition of matter of the particular Product. For clarity, such first “composition of matter” Genmab Program Patent Rights may not be the first to be filed Patent Rights Covering the particular Product if such first to be filed Patent Rights do not also claim the specific composition of matter of such Product.
- 1.77** “**First Program Antibody**” shall mean Genmab’s proprietary [*****] as described in detail in **Exhibit 1.77**, that binds to the First Collaboration Target.
- 1.78** “**First Program Research Plan**” shall have the meaning set forth in Section 5.1.1, such First Program Research Plan as of the Effective Date being attached hereto as **Exhibit 5.1.1**.
- 1.79** “**FTE**” shall mean, with respect to a person, the equivalent of the work of one (1) employee full time for one (1) year (consisting of at least [*****] working hours per year (with no further reductions for vacations and holidays)). Overtime, and work on weekends, holidays and the like will not be counted with any multiplier (e.g., time-and-a-half or double time) toward the number of hours that are used to calculate the FTE contribution. The portion of a FTE billable by CureVac or Genmab for one (1) individual during a given accounting period shall be determined by dividing the number of hours worked by said individual on the work to be conducted under the Agreement during such accounting period and the number of FTE hours applicable for such accounting period based on [*****] working hours per calendar year. For clarity, no individual person can ever constitute more than a single FTE.
- 1.80** “**FTE Rate**” shall mean, for the period commencing on the Effective Date until such time as the Parties mutually agree otherwise, an annual rate of [*****]. The FTE Rate shall include all fully loaded costs, including costs of salaries, benefits, supplies, other employee costs, consumables, overhead and supporting general and administration allocations. In the event of Opt-In by CureVac, the Parties will renegotiate and agree in good faith on a new FTE Rate which should be reflective of the stage of development and market conform.
- 1.81** “**FTO License**” shall have the meaning set forth in Section 10.6.4.
- 1.82** “**Force Majeure**” shall have the meaning set forth in Section 17.2.
- 1.83** “**Generally Applicable Patent Right**” shall mean a claim of a Genmab Program Patent Right Covering (i) a [*****] (“**Target Class Inventions**”); (ii) an Antibody or Antibody Combination functionally defined in such claim as [*****] and (iii) a [*****] *provided*, however, that for each of (i), (ii) and (iii), where the Invention is made, conceived and/or reduced to practice after the Research Period, such claim shall only be considered a Generally Applicable Patent Right if [*****] with respect to such claim. For avoidance of doubt, the term Generally Applicable Patent Right shall not include any claim where the Program Antibody or Program Antibody Combination is functionally defined as binding to a Collaboration Target or Collaboration Target Combination or even more specifically, such as e.g. where the Program Antibody or Program Antibody Combination is functionally defined as binding to an epitope on a Collaboration Target or epitopes on the Collaboration Targets included in the Collaboration Target Combination or where the Program Antibody or Program Antibody Combination is defined by sequences.

- 1.84** “**Generic Product**” shall mean, with respect to a particular Product in a particular country in the Territory, any pharmaceutical product (other than the Product) that (i) contains the same active ingredient(s) (including biosimilar or bioequivalent biologic API) in a comparable quality and quantity as such Product, irrespective of its pharmaceutical form, and is approved for the same indication as such Product, as applicable, and (ii) is approved for sale in the country pursuant to a regulatory approval process governing the approval of generic, interchangeable, biosimilar or bioequivalent biologic products, with the Product being the reference product.
- 1.85** “**Generic Therapeutic Concept**” shall mean an Invention consisting of a new approach to therapy or treatment that has general applicability beyond use of such approach in relation to the Collaboration Target or specific Collaboration Target Combination (i.e. the Optioned Target Combination) that is targeted by a Program Antibody or Program Antibody Combination, as applicable. By way of non-limiting examples, a Generic Therapeutic Concept would include (i) an Invention consisting of combining [*****] different Antibodies targeting [*****] different pathways such as an anti-apoptotic pathway, an anti-proliferative pathway and an anti- metastatic pathway to obtain a certain therapeutic effect; and (ii) an Invention relating to a [*****]. The term Generic Therapeutic Concept shall not comprise Target Class Inventions. Further, the term Generic Therapeutic Concept shall not comprise the therapeutic or treatment approach to the extent that such approach applies to a Collaboration Target or specific Collaboration Target Combination.
- 1.86** “**Genmab Alliance Manager**” shall have the meaning set forth in Section 9.1.1.
- 1.87** “**Genmab Background Technology**” shall have the meaning as set forth in Section 11.1.
- 1.88** “**Genmab Indemnified Parties**” shall have the meaning set forth in Section 14.2.
- 1.89** “**Genmab Invention**” shall have the meaning set forth in Section 11.3.1.

- 1.90** “**Genmab Know-How**” shall mean all Know-How Controlled by Genmab or its Affiliates as of the Effective Date or thereafter during the Term that (a) is necessary for CureVac to perform the obligations and other activities pursuant to this Agreement, or (b) is used by or on behalf of Genmab its Affiliates or Sub-licensees to Develop, Manufacture and Commercialize Products under this Agreement. Genmab Know-How shall include (i) Know-How comprised in the Genmab Background Technology; (ii) Know-How related to Genmab Inventions; and (iv) other Know-How generated by Genmab under a Program. Notwithstanding the foregoing, if any Third Party becomes an Affiliate of Genmab after the Effective Date, Genmab Know-How will exclude any Know-How that is Controlled by such Third Party before such Third Party became Genmab’s Affiliate. The Genmab Know-How as so defined existing at the Effective Date is further described in **Exhibit 1.90**.
- 1.91** “**Genmab Materials**” shall mean any compounds, assays or other materials, including sequences and recombinant proteins, that are disclosed or otherwise made available by or on behalf of Genmab and/or its Affiliate(s) to CureVac hereunder for the purposes of this Agreement, including materials set forth on **Exhibit 5.1.1**, and progeny, modifications or derivatives thereof that do not include use of CureVac Materials.
- 1.92** “**Genmab Other Invention**” shall have the meaning set forth in Section 11.3.3.
- 1.93** “**Genmab Other Invention Patent Right**” shall have the meaning set forth in Section 11.7.5.
- 1.94** “**Genmab Patent Right(s)**” shall mean all Patent Rights Controlled by Genmab or its Affiliates as of the Effective Date or thereafter during the Term that (a) is necessary for CureVac to perform the obligations and other activities pursuant to this Agreement, or (b) [****] Genmab its Affiliates or Sub-licensees to Develop, Manufacture and Commercialize Products under this Agreement. Genmab Patent Rights shall include Patent Rights comprised in the Genmab Background Technology, Genmab Program Patent Rights, Genmab Other Invention Patent Rights and Genmab’s interest in Joint Patent Rights.
- 1.95** “**Genmab Program Patent Right**” shall mean a Program Patent Right owned by Genmab, as set forth in Section 11.3 below, that Covers a Genmab Invention.
- 1.96** “**Genmab Project Leader**” shall have the meaning set forth in Section 9.1.2.
- 1.97** “**Genmab Technology**” shall mean any and all Genmab Patent Rights, Genmab Inventions and Genmab Know-How.
- 1.98** “**GxP**” shall mean the good practice regulations in the pharmaceutical industry with respect to distribution, manufacturing, clinical and laboratory practices (GDP, GMP, GCP and GLP).
- 1.99** “**IND**” shall mean an investigational new drug application filed with, and accepted by, the FDA prior to beginning clinical trials in humans in the USA, or any comparable application to and acceptance by the Regulatory Authority of a country or group of countries other than the USA thereto including the European Medicines Authority (“**EMA**”) prior to beginning clinical trials in humans in that country or in that group of countries.
- 1.100** “**Indication**” shall mean, with respect to a particular Product, the use of such Product for treating a separate and distinct disease or medical condition.

- 1.101** “**Invention**” shall mean an invention or discovery, whether or not patentable, discovered, made, conceived and/or first reduced to practice during the Term by or on behalf of CureVac or Genmab or Affiliates of CureVac or Genmab, alone or jointly with each other and/or any Third Party, which arise from the performance of activities under this Agreement, including performance of activities under the R&D Plans, or under the Material Transfer and Technology Evaluation Agreement.
- 1.102** “**IP Sub-committee**” shall mean the sub-committee to be established pursuant to Section 9.6.
- 1.103** “**Joint Commercialization Committee**”, and “**JCC**” shall have the meaning set forth in Section 7.7(i).
- 1.104** “**Joint Development and Manufacturing Agreement**” shall have the meaning set forth in Section 7.6.
- 1.105** “**Joint Invention**” shall have the meaning set forth in Section 11.3.3.
- 1.106** “**Joint Patent Rights**” shall have the meaning set forth in Section 10.8.1.
- 1.107** “**Joint Research Committee**”, and “**JRC**” shall have the meaning set forth in Section 9.2.
- 1.108** “**Joint Steering Committee**”, and “**JSC**” shall have the meaning set forth in Section 7.2.
- 1.109** “**Know-How**” shall mean all technical, scientific and other information, inventions, discoveries, trade secrets, knowledge, technology, means, methods, processes, practices, formulae, instructions, skills, techniques, procedures, expressed ideas, technical assistance, designs, drawings, assembly procedures, computer programs, apparatuses, specifications, Development Data, results, non-clinical, clinical, safety, process and Manufacturing and quality control data and information (including trial designs and protocols), registration dossiers, in each case, solely to the extent confidential and proprietary and in written, electronic or any other form now known or hereafter Developed.
- 1.110** “**LNP**” shall mean a lipid nanoparticle system comprised of individual lipid components at specific ratios, which are manufactured in such a manner to encapsulate and deliver mRNA into a target cell.
- 1.111** “**LNP Technology**” shall mean Patent Rights and Know-How covering an LNP system (i.e. a lipid nanoparticle system which is used to formulate and deliver mRNA), as further defined in **Exhibit 1.111** hereto.
- 1.112** “**LNP Technology License Documentation Package**” shall have the meaning set forth in Section 4.2 below.
- 1.113** “**Major Markets Countries**” shall mean [*****].

- 1.114 “**Manufacture**” shall mean all manufacturing operations (including for mRNA, lipids and drug product as well as formulation, fill and finish, packaging and labelling) for Products, including all activities related to the preparation and use of master and working cell banks, making, production, processing, purifying, formulating, filling, and finishing, of the Product, or any intermediate thereof, pre-clinical, clinical and commercial production, product, stability testing, quality assurance, and quality control. “**Manufacturing**” has a correlative meaning.
- 1.115 “**Materials**” shall mean CureVac Materials and Genmab Materials.
- 1.116 “**Material Transfer and Technology Evaluation Agreement**” shall mean that certain Material Transfer and Technology Evaluation Agreement entered into between the Parties as of April 12, 2017.
- 1.117 “**mRNA**” shall have the meaning set forth in the Introduction.
- 1.118 “**MSA**” shall have the meaning set forth in Section 6.4.2 below.
- 1.119 “**Negotiation Period**” shall have the meaning as set forth in Section 7.8.2.
- 1.120 “**Net Sales**” shall mean, with respect to each Product, the gross amount invoiced for sales of such Product by or on behalf of Genmab and its Affiliates and Sublicensees to unrelated Third Parties (i.e., excluding Sublicensees), less the following deductions [*****]:
- a. [*****]
 - b. [*****]
 - c. [*****]

- d. [*****]
- e. [*****]
- f. [*****] and
- g. [*****]

[*****].

Disposition of Product for, or use of the Product in, clinical trials or other scientific testing, as free samples, or under compassionate use, patient assistance, or test marketing programs or other similar programs or studies where a Product is supplied without charge shall not result in any Net Sales, however if Genmab or any of its Affiliates or Sublicensees charges for such Product, the amount billed will be included in the calculation of Net Sales, but for the sake of clarity such disposition or use of the Product shall never constitute a First Commercial Sale.

In the event a Product is sold as a Combination Product, Net Sales of the Combination Product will be calculated, on a [*****] as follows:

- (i) [*****].

- (ii) [*****].
- (iii) [*****].
- (iv) [*****].
- (v) [*****].

- 1.121** “**New Patent Right**” shall have the meaning set forth in Section 2.9.
- 1.122** “**Non-Assigning Party**” shall have the meaning set forth in Section 7.8.2.
- 1.123** “**Non-Breaching Party**” shall have the meaning set forth in Section 15.4.
- 1.124** “**Non-Terminating Party**” shall have the meaning set forth in Section 7.9.
- 1.125** “**Opt-In**” shall have the meaning set forth in Section 7.1.
- 1.126** “**Opt-In Data Package**” shall have the meaning set forth in Section 7.1.
- 1.127** “**Opt-In Product**” shall have the meaning set forth in Section 7.1.
- 1.128** “**Opt-In Product Assignment**” shall have the meaning set forth in Section 7.8.2.
- 1.129** “**Opt-In Program**” shall mean a Program (for a [*****]) for which CureVac has exercised its right to Opt-In.

- 1.130 “**Opt-In R&D Plan**” shall have the meaning set forth in Section 7.2.
- 1.131 “**Opt-In Target**” shall have the meaning set forth in Section 7.1.
- 1.132 “**Opt-In Termination Notice**” shall have the meaning set forth in Section 7.9.
- 1.133 “**Option Exercise**” shall have the meaning set forth in Section 3.4.
- 1.134 “**Option Exercise Fee**” shall have the meaning set forth in Section 10.2.
- 1.135 “**Option Period**” shall have the meaning set forth in Section 3.4 below.
- 1.136 “**Optioned Target**” shall mean a Reserved Target for which Genmab has exercised its option under Section 3.4 below. For purposes of this Agreement, and unless otherwise set forth herein, Optioned Target shall include an Optioned Target Combination, as applicable.
- 1.137 “**Optioned Target Combination**” shall have the meaning set forth in Section 3.4.
- 1.138 “**Other Pre-IND Program**” shall mean a Program envisaged in Section 5.2.3 directed against an Optioned Target and including an Other Program Antibody (for clarity, excluding the First Collaboration Program) and LNP Technology.
- 1.139 “**Other Pre-IND Program Research Plan**” shall have the meaning set forth in Section 5.2.3 below.
- 1.140 “**Other Program Antibody**” shall mean a Program Antibody (i) that binds to an Optioned Target, or to an Optioned Target Combination; and (ii) that Genmab has elected to use and is to be used in an Other Pre-IND Program as described in Section 5.2.3. To the extent applicable, and unless otherwise set forth, Other Program Antibody shall include Other Program Antibody Combinations.
- 1.141 “**Other Program Antibody Combination**” shall mean a Program Antibody Combination that (i) binds to an Optioned Target, or to an Optioned Target Combination; and (ii) Genmab has elected to use and is to be used in an Other Pre-IND Program as described in Section 5.2.3.
- 1.142 “**Other Invention**” shall have the meaning set forth in Section 11.3.3.
- 1.143 “**Other Invention Patent Right**” shall mean a CureVac Other Invention Patent Right or Genmab Other Invention Patent Right, as applicable.
- 1.144 “**Other Technologies**” shall mean the technologies licensed to CureVac (i) by GeneArt AG under a license agreement dated [*****] concerning [*****]; (ii) by TriLink Biotechnologies LLC under a license Agreement dated [*****], [*****]. The respective Patent Rights are listed in **Exhibit 1.144**.

- 1.145 “**Parties**” shall mean CureVac and Genmab.
- 1.146 “**Party**” shall mean CureVac or Genmab.
- 1.147 “**Patent Rights**” shall mean any and all patents and patent applications, including provisional and non-provisional applications, reissues, extensions, substitutions, confirmations, re-registrations, re-examinations, re-validations, patents of addition, supplementary protection certificates or the equivalents thereof, continuations, continuations-in-part and divisionals thereof and all foreign counterparts, and the like of any of the foregoing.
- 1.148 “**Patent Term Extensions**” shall have the meaning set forth in Section 10.9.
- 1.149 “**Person**” shall mean an individual, firm, company, corporation, association, trust, estate, state or agency of a state, government or government department or agency, municipal or local authority and any other entity, whether or not incorporated and whether or not having a separate legal personality.
- 1.150 “**Pivotal Study**” shall mean a Clinical Study of Product in human patients intended to provide evidence for drug marketing approval. Clinical Phase III Studies are typically Pivotal Studies, and in exceptional cases a Clinical Phase II Study may become a Pivotal Study, and may require additional confirmatory studies post approval.
- 1.151 “**Product**” shall mean any product that contains one or more mRNA construct(s) that is designed to express a Program Antibody or a Program Antibody Combination, and formulated with [*****]. Product includes both a [*****] or a [*****]. For clarification, a Product may consist of several mRNA constructs that together express a Program Antibody or Program Antibody Combination.
- 1.152 “**Product Development Plan(s)**” shall mean the development plans to be prepared upon Product Selection under any Program for the further Development of a Product, as set forth in Section 5.3.
- 1.153 “**Product Selection**” shall have the meaning set forth in Section 5.3.
- 1.154 “**Product Selection Notice**” shall have the meaning set forth in Section 5.3.
- 1.155 “**Product Development Program**” shall mean a program for the further Development of a Product pursuant to a Product Development Plan.
- 1.156 “**Program**” shall mean, on a Collaboration Target-by-Collaboration Target basis, any and all Development, Manufacturing and Commercialization activities conducted under R&D Plans. Programs shall include the First Collaboration Program. Save in respect of the First Collaboration Program, the sequence of a Program shall be (i) Research Program; then (ii) Other Pre-IND Program; then (iii) Product Development Program.
- 1.157 “**Program Antibody**” shall mean a [*****] that [*****] and that Genmab has elected to use in a Program and which has been finally cleared under Section 3.2.2. To the extent applicable, and unless otherwise set forth, [*****].

- 1.158 “**Program Antibody Combination**” shall mean an Antibody Combination that Genmab has elected to use in a Program and which has been finally cleared under Section 3.2.2.
- 1.159 “**Program Breach**” shall have the meaning set forth in Section 15.4.
- 1.160 “**Program Patent Rights**” shall mean Patent Rights Covering Inventions.
- 1.161 “**Project Leaders**” shall have the meaning set forth in Section 9.1.2 below.
- 1.162 “**R&D Plan(s)**” shall mean the research and development plans to be prepared under this Agreement and shall include the First Program Research Plan in Exhibit 5.1.1, the Reserved Target Research Plans, the Other Pre-IND Program Research Plans, the Opt-In R&D Plan, and the Product Development Plans.
- 1.163 “**Receiving Party**” shall have the meaning set forth in Section 13.1.
- 1.164 “**Regulatory Agency**” shall mean any one of the following: United States Food and Drug Administration (“**FDA**”) or any successor agency; or any counterparts thereof in jurisdictions outside of the U.S.
- 1.165 “**Regulatory Approval**” shall mean any and all approvals (including supplements, amendments, pre- and post-approvals, pricing and reimbursement approvals), licenses, registrations or authorizations (including marketing and labeling authorizations) of any national, supra-national (e.g., the European Commission or the Council of the European Union), regional, state or local Regulatory Agency, department, bureau, commission, council or other governmental entity, that are necessary for the development, registration, manufacture (including formulation), distribution, use, sale, import or export of a Product in a given jurisdiction.
- 1.166 “**Regulatory Exclusivity**” shall mean any exclusive marketing rights or data exclusivity rights conferred by any Regulatory Agency with respect to a Product, other than Patent Rights.
- 1.167 “**Relevant Infringement**” shall have the meaning set forth in Section 11.1.
- 1.168 “**Replacement Target**” shall have the meaning set forth in Section 3.1.
- 1.169 “**Replacement Target Exclusivity Period**” shall have the meaning set forth in Section 2.1.2.

- 1.170 “**Replacement Target Antibody**” shall mean a single Antibody directed at a Replacement Target.
- 1.171 “**Research Completion Deadline**” shall have the meaning set forth in Section 5.2.1.
- 1.172 “**Research Period**” shall mean, on a Target-by-Target basis, the period during which research and Development activities under this Agreement are being conducted (i) under the First Program Research Plan (whether in relation to the First Program Antibody or in relation to a Replacement Target Antibody); and (ii) the Reserved Target Research Plans (to be determined on a Research Target-by-Research Target basis); and/or (iii) the Other Pre-IND Program Research Plans (to be determined on an Optioned Target -by- Optioned Target basis).
- 1.173 “**Research Program**” shall mean a program of research relating to a Reserved Target, a Research Program Antibody and LNP Technology.
- 1.174 “**Research Program Antibody**” shall mean a Program Antibody (i) that [*****] as applicable; and (ii) that Genmab has elected to use and is to be used in a Reserved Target Research Plan as described in Section 5.2.1.
- 1.175 “**Research Program Antibody Combination**” shall mean a Program Antibody Combination that [*****].
- 1.176 “**Reservation Fee**” shall have the meaning set forth in Section 3.3 below.
- 1.177 “**Reservation Period**” shall have the meaning set forth in Section 3.2.1 below.
- 1.178 “**Reserved Target**” shall have the meaning set forth in Section 3.2.1 below. For purposes of this Agreement, and unless otherwise set forth herein, Reserved Target shall include a Reserved Target Combination, as applicable.
- 1.179 “**Reserved Target Combination**” shall have the meaning set forth in section 3.2.1 below.
- 1.180 “**Reserved Target Data Package**” shall have the meaning set forth in Section 5.2.2.
- 1.181 “**Reserved Target Research Plan**” shall have the meaning set forth in Section 5.2.1 below.
- 1.182 “**Roche License**” shall mean the non-exclusive license made between CureVac and F.Hoffmann-La Roche Ltd dated [*****] granting Roche [*****]. For the purposes of this Agreement, the term Roche License shall not include any amendments made to the non- exclusive license agreement between CureVac and Roche after the Effective Date.
- 1.183 “**Royalty Product Patent Rights**” shall mean, on a Product-by-Product basis the First Composition of Matter Patent Rights. For the avoidance of doubt, the term Royalty Product Patent Rights shall not include any later filed Patent Rights not claiming priority from or comprised in the First Composition of Matter Patent Rights, such as later filed Patent Rights that relate to other aspects of the Product (e.g., Patent Rights relating to formulation, processes, uses or other applications of the Product).

- 1.184** “**Royalty Term**” shall have the meaning set forth in Section 10.6.3.
- 1.185** “**Single Antibody Product**” shall mean a Product that is designed to express one Program Antibody. Single Antibody Product includes the First Program Antibody and the Replacement Target Antibody.
- 1.186** “**Sub-Committee**” shall have the meaning set forth in Section 9.4 below.
- 1.187** “**Sublicensee**” shall mean any Third Party licensee (aside from Genmab’s Affiliates and any Third Party contractors used by Genmab in the Development, Manufacture or Commercialization of the Products on Genmab’s behalf), which obtains rights to the CureVac Technology or LNP Technology under a license granted by Genmab, its Affiliates or another such Third Party that was sublicensed such rights by Genmab, its Affiliates or another Sublicensee.
- 1.188** “**Successful GLP Tox**” shall mean the earlier of (i) the date where a formal decision by Genmab’s relevant project board or equivalent to file for IND submission is communicated to CureVac, whether or not the JRC has received data confirming that the success criteria as defined in the R&D Plan for the formal toxicology studies required for such IND submission have been fulfilled; or (ii) [*****] after the JRC has received data confirming that the success criteria as defined in the R&D Plan for the formal toxicology studies required for such IND submission have been fulfilled.
- 1.189** “**Switching Costs**” shall mean those incremental additional payments to be made by CureVac to a provider of LNP Technology other than under the Acuitas License or Arcturus License resulting from the decision by Genmab to switch from the First Collaboration Target to a Replacement Target, including payment of additional license or reservation fees and/or increased royalties because a new license of LNP Technology is required other than the Arcturus License or Acuitas License. For clarity, the term “Switching Costs” shall only comprise the delta between what CureVac would have had to pay to Arcturus under the Arcturus License or to Acuitas under the Acuitas License for an LNP Technology license relating to the First Collaboration Target and what CureVac will have to pay to a provider of LNP Technology other than under the Acuitas License or Arcturus License for an LNP Technology license relating to the Replacement Target. The Switching Costs shall be determined from time to time when any payment relating to the Replacement Target is due under such LNP Technology license other than Acuitas License or Arcturus License by comparing the actual total payments made or due under such other LNP Technology license with the payments that would have been made by or due from CureVac under the Arcturus License or Acuitas License with respect to the given Product. Whether the Arcturus License or Acuitas License will be used as reference point when making such calculations of the then current total Switching Costs will depend on which of the two LNP Technologies that were used for Product based on the First Program Antibody.

- 1.190** “**Target**” shall mean a distinct single antigen defined by its unique UniProt/SwissProt number. For purposes of this Agreement, and unless otherwise set forth herein, Target shall include a Target Combination, as applicable.
- 1.191** “**Target List**” and “**Target List Rep**” shall have the meanings set forth in Section 3.2.2.
- 1.192** “**Target Combination**” shall mean a combination of up to [*****] distinct antigens per Product, as defined by their unique UniProt/SwissProt numbers.
- 1.193** “**Target Subset**” shall mean any individual Targets or subcombinations thereof within an Optioned Target Combination which does not contain the specific combination of Targets constituting an Optioned Target Combination targeted by an Other Program Antibody or Other Program Antibody Combination (e.g., if Genmab has exercised an Optioned Target Combination consisting of “a+b+c”, then any individual Target or other subcombination of Targets within the Optioned Target Combination of “a+b+c”, i.e. the combinations of “a+b”, “b+c” or “a+c” or the individual Targets “a” or “b” or “c”), would each constitute a Target Subset.
- 1.194** “**Term**” shall have the meaning set forth in Section 15.1.
- 1.195** “**Terminating Party**” shall have the meaning set forth in Section 7.9.
- 1.196** “**Territory**” shall mean the world.
- 1.197** “**Third Party**” shall mean any Person, other than CureVac or Genmab and their respective Affiliates.
- 1.198** “**Third Party IP**” shall have the meaning set forth in Section 2.8.
- 1.199** “**Valid Claim**” shall mean either (i) a claim of an issued and unexpired patent within (A) CureVac Patent Rights, excluding any claim within the CureVac Program Patent Rights, CureVac Other Invention Patent Rights or Joint Patent Rights Covering a Product where such CureVac Program Patent Right(s), CureVac Other Invention Patent Right(s) or Joint Patent Right(s) has a later priority date than any Royalty Product Patent Right Covering such Product; (B) Patent Rights within LNP Technology Controlled by CureVac and licensed by CureVac to Genmab under or in connection with this Agreement; or (C) Royalty Product Patent Rights, and, in each case of (A), (B) and (C), which has not been revoked or held permanently unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been found or admitted to be abandoned, disclaimed, denied, invalid or unenforceable through re-examination, reissue or disclaimer or otherwise; or (ii) a claim of a pending patent application within the CureVac Patent Rights, (excluding any claim within the CureVac Program Patent Rights, CureVac Other Invention Patent Rights or Joint Patent Rights Covering a Product where such CureVac Program Patent Right(s), CureVac Other Invention Patent Rights or Joint Patent Right(s) has a later priority date than any Royalty Product Patent Right Covering such Product), Patent Rights within LNP Technology Controlled by CureVac and licensed by CureVac to Genmab under or in connection with this Agreement, or Royalty Product Patent Rights, which claim has not been cancelled, withdrawn, abandoned or finally disallowed, and which claim has been prosecuted in good faith and not been pending for more than [*****] from the date of its earliest priority date. For avoidance of doubt, the term “Valid Claim” shall not include any claim of Third Party IP that has been deemed part of CureVac Technology pursuant to Section 2.8.

1.200 Interpretation

In this Agreement, unless the context otherwise requires, a reference to:

- (i) a paragraph, section, exhibit or schedule is a reference to a paragraph, section, exhibit or schedule to this Agreement;
- (ii) any document includes a reference to that document (and, where applicable, any of its provisions) as amended, novated, supplemented or replaced from time to time;
- (iii) a statute or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (iv) the singular includes the plural and vice versa, except as it regards the definitions of Party and Parties;
- (v) one gender includes the other;
- (vi) “written” and “in writing” include any means of reproducing words, figures or symbols in a tangible and visible form, including acknowledged email or facsimile;
- (vii) a month or year is a reference to a calendar month or Calendar Year, as the case may be;
- (viii) “include”, “includes” and “including” means including without limitation, or like expression unless otherwise specified, and “for example”, “e.g.”, “such as” and similar words or phrases are descriptive, not limiting; and
- (ix) the official text of this Agreement and any Exhibits shall be in English, and any notices given or accounts or statements for communication between the Parties will be in English and in the event of any dispute concerning the construction or interpretation of this Agreement, reference shall be made only to this Agreement as written in English and not to any other translation into any other language.

2. LICENSES; EXCLUSIVITY.

2.1 License Grants to Genmab.

2.1.1 First Collaboration Target License. With respect to the First Collaboration Target and the First Program Antibody, subject to the terms and conditions of the Agreement, and for the Term, CureVac hereby grants to Genmab, and Genmab hereby accepts, an exclusive (subject to Section 2.1.6) license under the CureVac Technology to Develop, Manufacture and Commercialize a Single Antibody Product in the Field and in the Territory. This license shall automatically terminate upon final clearance by CureVac of a Replacement Target and related Program Antibody nominated by Genmab in accordance with Section 3.2.2 below. For clarity, the grant of a license under this Section 2.1.1 to [*****], unless otherwise specified in this Agreement.

2.1.2 Replacement Target License. With respect to a Replacement Target nominated by Genmab and cleared by CureVac under the provisions of Section 3.2.2, as of the final clearance of such Replacement Target and related Program Antibody(-ies), and subject to the terms and conditions of this Agreement, and for a term starting upon clearance of the Replacement Target and ending at the earlier of (i) [*****], or (ii) [*****] after clearance of the respective Replacement Target (“**Replacement Target Exclusivity Period**”), CureVac hereby grants to Genmab, and Genmab accepts, an exclusive (subject to Section 2.1.6) license under the CureVac Technology to Develop, Manufacture and Commercialize a Single Antibody Product in the Field in the Territory. For clarity, the grant of a license under this Section 2.1.2 to Manufacture shall not require CureVac to transfer any Know-How comprised in the CureVac Manufacturing Technology, unless otherwise specified in this Agreement.

2.1.3 Reserved Target License. With respect to a Reserved Target, subject to the terms and conditions of this Agreement, and for a period of [*****] after the Effective Date, CureVac hereby grants to Genmab, and Genmab hereby accepts an exclusive (subject to Section 2.1.6) license under the CureVac Technology to conduct or have conducted research and pre-clinical Development on Antibody-based Products in the Field and in the Territory, such research and pre-clinical Development to enable Genmab to make a decision as to whether it wants to advance the Reserved Target to an Optioned Target. If the Reserved Target is a Reserved Target Combination, the exclusivity under this Section 2.1.3 shall apply to all combinations, including subsets of combinations within the respective Reserved Target Combination, but does not apply to individual Targets within such Reserved Target Combination. For illustration purposes, if the Reserved Target Combination was a+b+c, the exclusivity would also apply to the combination of a+b, b+c and a+c, but not to a, b or c individually.

2.1.4 Optioned Target License. With respect to any Optioned Target, subject to an Option Exercise under Section 3.4 below, and subject to the terms and conditions of this Agreement, and for a term starting upon Option Exercise and ending at the earlier of (i) [*****]; or (ii) [*****] after the Option Exercise (“**Optioned Target Exclusivity Period**”), CureVac hereby grants to Genmab, and Genmab hereby accepts an exclusive (subject to Section 2.1.6) license under the CureVac Technology to Develop, Manufacture and Commercialize Single Antibody Products or Cocktail Products, as applicable. If the Optioned Target is an Optioned Target Combination, the exclusivity under this Section 2.1.4 applies to the specific combination within the respective Optioned Target Combination, and neither applies to any other combinations, nor to individual Targets within such Optioned Target Combination. The grant of a license under this Section 2.1.4 to Manufacture shall not require CureVac to transfer any Know-How comprised in the CureVac Manufacturing Technology, unless otherwise specified in this Agreement.

- 2.1.5 Other Product Licenses.** With respect to any Product (and related Program Antibodies and Program Antibody Combinations) generated during Replacement Target Exclusivity Period, Reservation Period or Optioned Target Exclusivity Period, subject to the terms and conditions of this Agreement, and for the Term, CureVac hereby grants to Genmab, and Genmab hereby accepts, an exclusive (subject to Section 2.1.6) license under the CureVac Technology to Develop, Manufacture and Commercialize such Products in the Field and in the Territory. For clarity, the grant of a license under this Section 2.1.5 to [*****].
- 2.1.6 BioNTech License and Roche License.** Notwithstanding the above, until [*****] the licenses under the CureVac Technology granted to Genmab pursuant to this Section 2.1 shall be non-exclusive with respect to rights under Patent Rights [*****] listed in **Exhibit 1.13** to the extent the non-exclusive license granted by CureVac to BioNTech AG is overlapping with the license granted to Genmab under said Patent Rights. Further, until [*****] the licenses under the CureVac Technology granted to Genmab pursuant to this Section 2.1 shall be non-exclusive with respect to rights under [*****] to the extent the non-exclusive license granted by CureVac to F.Hoffmann-La Roche Ltd is overlapping with the licenses granted to Genmab under [*****].”.
- 2.1.7 Other Technologies Licenses.** The rights granted under this Section 2.1 (2.1.1, 2.1.2, 2.1.3, 2.1.4, and 2.1.5) include (i) an extension of CureVac’s rights to Genmab, its Affiliates, subcontractors and permitted Sublicensees as “Direct Collaboration Partner” or “Indirect Collaboration Partner” under the Patent Rights identified by the patent family identifier CV-P- Geneart in **Exhibit 1.144**; and (ii) a non-exclusive sublicense of CureVac to Genmab, under the Patent Rights identified by the patent family identifier [*****] in **Exhibit 1.144**.
- 2.2 Sublicenses.** Subject to the terms and conditions of this Agreement, Genmab shall have the right to sublicense any and all rights licensed to Genmab under Section 2.1 to its Affiliates. With respect to any and all rights licensed to Genmab under Section 2.1, and subject to the terms and conditions of this Agreement, Genmab shall have the right to sublicense to any Third Party (with the right to sublicense in multiple tiers) [*****] only upon CureVac’s prior written consent which CureVac may grant or withhold in its sole discretion. [*****], Genmab shall have the right to sublicense any and all rights licensed to Genmab under Sections 2.1.1 (First Collaboration Target) or 2.1.2 (Replacement Target), Section 2.1.5 (other Product license) and Section 2.1.7 (Other Technologies License) to any Third Party (with the right to sublicense in multiple tiers) upon CureVac’s prior written consent which shall not be unreasonably withheld; and such consent is only required if such Third Party is either a direct competitor of CureVac within the field of the development of mRNA-based products (such as, but not limited to, [*****] and/or is residing in [*****] at the time when Genmab wishes to grant such sublicense. After [*****] Genmab shall have the right to sublicense any and all rights licensed to Genmab under Sections 2.1.1 or 2.1.2 Section 2.1.5 and Section 2.1.7 (Other Technologies License) without CureVac’s prior written consent. Any sublicense by Genmab to a Third Party shall be in writing and consistent with and subject to the terms of this Agreement, and shall include an obligation for each such Sublicensee to comply with the applicable obligations of Genmab set forth in this Agreement. Genmab will provide CureVac with written notice of any [*****].

- 2.3 License Grants to CureVac.** Subject to the terms and conditions of the Agreement, Genmab hereby grants to CureVac, and CureVac hereby accepts, a non-exclusive, royalty-free license under the Genmab Technology to perform CureVac's obligations under the Agreement with respect to the research and Development of Products on behalf of Genmab.
- 2.4 Exclusivity.**
- 2.4.1 Genmab.** Except for the exercise of rights hereunder with respect to Products, neither Genmab, its Affiliates nor its Sublicensees holding exclusive rights to the CureVac Technology in the Field and in the Territory, shall develop or commercialize an mRNA-based [*****] Antibody (including a [*****] Antibody) product or a [*****] Antibody that is based on [*****] as described in Exhibit 1.77.
- 2.4.2 CureVac on the First Collaboration Target.** During the term of this Agreement, CureVac, itself or through its Affiliates, shall not, directly or indirectly, offer any rights to a Third Party under the LNP Technology for the First Collaboration Target or conduct or participate in the research, development, manufacture, use, offer for sale, or other exploitation of any mRNA-based product that is designed to express a Single Antibody (including monoclonal, bispecific or multispecific Antibody) product that is directed at the First Collaboration Target or any recombinant single Antibody (including monoclonal, bispecific or multispecific Antibody) product directed at the First Collaboration Target. Notwithstanding the above, if Genmab replaces the First Collaboration Target with a Replacement Target pursuant to Section 3.1, then CureVac shall be released from its exclusivity obligations set out above in this Section 2.4.2 as of the date of such replacement and instead Section 2.4.3 shall apply with respect to the Replacement Target.
- 2.4.3 CureVac on the Replacement Target.** CureVac, itself or through its Affiliates, shall not, directly or indirectly, offer any rights to a Third Party under the CureVac Technology or LNP Technology for the Replacement Target or conduct or participate in the research, development, manufacture, use, offer for sale, or other exploitation of any recombinant or mRNA-based Antibody product directed at the Replacement Target until the earlier of (i) [*****]; and (ii) [*****] after final clearance of the Replacement Target under Section 3.2.2.

- 2.4.4 CureVac on Reserved Targets and Reserved Target Combinations; Optioned Targets and Optioned Target Combinations; Opt-In Target.** Once a Target or Target Combination, as applicable, becomes a Reserved Target or Reserved Target Combination, CureVac, itself or through its Affiliates, shall not directly or indirectly, offer any rights to a third party under the CureVac Technology or LNP Technology for such Reserved Target or Reserved Target Combination or conduct or participate in the research, development, manufacture, use, offer for sale, or other exploitation of any mRNA-based product that is designed to express an Antibody or Antibody Combination that is directed at such Reserved Target or Reserved Target Combination, or any recombinant Antibody product or Antibody Combination product directed at such Reserved Target or Reserved Target Combination. The non-compete obligations under this Section 2.4.4 shall continue until expiry of the Reservation Period for such Reserved Target or Reserved Target Combination, as applicable, unless Genmab exercises an Option with respect to a Reserved Target or Reserved Target Combination, as applicable, in which case the non-compete obligations with respect to such Target or Target Combination (then an Optioned Target or Optioned Target Combination) shall remain in effect until the end of the Optioned Target Exclusivity Period. CureVac retains its rights to conduct or participate in the research, development, manufacture, use, offer for sale, or other exploitation of mRNA or recombinant based products directed at single Targets of a Reserved Target Combination during the Reservation Period, but not for combinations of individual Targets within a Reserved Target Combination (e.g., a combination of a+b where the Reserved Target Combination consists of a+b+c). After the Reservation Period, the non-compete obligations under this Section 2.4.4 automatically expire with respect to any Target Combinations within the Reserved Target Combination that is not the Optioned Target Combination (e.g., if Genmab exercises an option for the combination a+b+c, then CureVac will get the rights back to work on e.g.; “a+b” or “a+b+c+d”); and after the Optioned Target Exclusivity Period, the non-compete obligations under this Section 2.4.4 automatically expire with respect to any Optioned Target and Optioned Target Combination that is not addressed by an Other Program Antibody. Notwithstanding anything to the contrary above, in the event of an Opt-In by CureVac under Section 7.1 and until the earlier of (i) an assignment by CureVac under Section 7.8 or (ii) CureVac’s termination of its [*****] collaboration of the Opt-In Program pursuant to Section 7.9, CureVac, itself or through its Affiliates, shall not, directly or indirectly, offer any rights to a Third Party under the CureVac Technology or LNP Technology for the Opt-In Target, or conduct or participate in the research, development, manufacture, use, offer for sale, or other exploitation of any mRNA-based product that is designed to express an Antibody product that is directed at the Opt-In Target or any recombinant Antibody product directed at the Opt-In Target. For avoidance of doubt, in the event of assignment by CureVac under Section 7.8 the exclusivity obligation set out above shall continue to apply with respect to the Third Party assignee.
- 2.5 Trademarks.** Genmab will be free to use and to register in any trademark office in the Territory any trademark for use with a Product in its sole discretion; *provided, however*, nothing herein shall grant Genmab any right to use any trademark Controlled by CureVac and/or its Affiliates. Genmab will own all right, title and interest in and to any such trademark it selects in its own name during and after the Term.
- 2.6 Know-How Transfer; Availability of Employees.** As and when required in relation to an R&D Plan (and from time to time during the Term if new Know-How comes to be Controlled by CureVac) or as soon as reasonably practicable upon Genmab’s request, CureVac shall disclose and/or deliver to Genmab copies of all Development Data and information in CureVac’s possession relating to the CureVac Know-How which is reasonably required for Genmab’s research and Development activity in accordance with the respective R&D Plan (including for regulatory purposes), with the exception, however, of all Know-How comprised in the CureVac Manufacturing Technology which shall be made available to Genmab or its designee as set forth in Sections 6.5 and/or pursuant to Tech Transfer Plan, the Early Clinical Supply Agreement and/or the MSA. [*****]. The technology transfer to be undertaken under Sections 2.6 and 6.5 shall be overseen by the Joint Research Committee.

2.7 No Implied License. Nothing in this Agreement shall be deemed to constitute the grant of any license or other right to either Party in respect of any technology of the other Party, except as expressly set forth herein, and no license rights shall be created hereunder by implication, estoppel or otherwise. Neither Party shall represent to any Third Party that it enjoys, possesses, or exercises any proprietary or property right or otherwise has any other right, title or interest in the technology of the other Party except for such rights as are expressly set forth herein. Any rights of a Party not expressly granted to the other Party under the provisions of this Agreement shall be retained by such Party.

2.8 Third Party Intellectual Property – CureVac Activities. If, during the Term, CureVac obtains a sub-licensable license to any Patent Rights or Know-How Controlled by a Third Party that is necessary or useful to Develop, Manufacture, Commercialize or otherwise exploit Products in the Field in the Territory (“**Third Party IP**”), then CureVac shall notify Genmab of the rights that CureVac has obtained with respect such Third Party IP (including details of the financial and commercial terms and other obligations that would be placed on Genmab as a sublicensee) promptly after obtaining such rights or, if reasonably possible before obtaining such rights and only in the circumstances that the license relates solely to a Product, allow Genmab to provide input to the draft terms to be taken into good faith consideration by CureVac. Genmab shall notify CureVac within [*****] after receipt of such notice whether Genmab desires to include such Third Party IP under the licenses granted to Genmab by CureVac pursuant to Section 2.1. If Genmab notifies CureVac that it desires to include Third Party IP under the license granted to Genmab by CureVac pursuant to Section 2.1, then (a) such Third Party IP is and shall be automatically included in the definition of CureVac Technology and in the licenses under Section 2.1, and (b) as a sublicensee of CureVac Genmab will meet all obligations of CureVac that are applicable to Genmab’s activities as a sub-licensee and have been disclosed by CureVac to Genmab; and (c) to the extent necessary CureVac will grant to Genmab a formal sublicense, and (d) subject to the below in this Section 2.8, [*****]. For avoidance of doubt, in the event that CureVac uses the Third Party IP for its own products or other Third Party products, [*****]. The proportionate amount shall be judged at the time of any payment by CureVac under the license, and shall be calculated by reference to the number of Products under Development by Genmab at that time in comparison to the number of products under research or development by CureVac or any licensee of CureVac and, if applicable, the number of available product slots (license options). For illustration purposes only, if Genmab then had one Product under Development, and CureVac and its licensees had five products under research or development and four available product slots (license options), the proportionate amount would be [*****] Genmab shall make such [*****] within [*****] after receipt of an invoice therefor from CureVac. For the avoidance of doubt, the obligations of [*****] amounts payable by CureVac to a Third Party as set forth in this Section 2.8 apply solely with respect to licenses under Third Party IP that are entered into by CureVac after the Effective Date. CureVac shall be solely responsible for any amounts payable with respect to licenses to Third Party IP entered into by CureVac (or an Affiliate to CureVac) prior to the Effective Date and forming part of CureVac Background Technology or Other Technologies. Notwithstanding anything to the contrary above, to the extent the Patent Rights comprised in the Third Party IP sublicensed hereunder to Genmab were granted Patent Rights as of the Effective Date and are referenced in the Disclosure Letter, then Genmab shall have the right to deduct one hundred per cent (100%) of the amounts [*****] to CureVac under this Section 2.8 from milestone payments due to CureVac under Section 10.5 and/or from royalties due to CureVac under Section 10.6 subject always to the provisions of Section 10.6.9. If Genmab decides that it does not wish to take a sublicense to such Third Party IP from CureVac it shall not be treated as part of CureVac Technology. If Genmab subsequently takes a license to such Third Party IP to which CureVac holds a license and where CureVac has previously offered an equivalent sublicense, [*****]. For avoidance of doubt, with respect to sublicenses from CureVac to Third Party IP not referenced in the Disclosure Letter or Third Party Patent Rights referenced in the Disclosure Letter that are not granted as of the Effective Date, then to the extent that such sublicenses qualify as FTO Licenses, Genmab shall have the right to deduct [*****] made to CureVac in accordance with the provisions set out in Section 10.6.6 (Other Third Party Payments) and subject always to the provisions of Section 10.6.9.

2.9 CureVac New Patent Rights. CureVac shall notify Genmab of any Patent Right and related Know-How Controlled by CureVac that (a) Cover an invention made by CureVac during the Term outside the scope of this Agreement and are unrelated to CVCN or LNP technology, and, for clarity, that are not in-licensed from a Third Party, and (b) are necessary or reasonably useful to Develop, Manufacture, Commercialize or otherwise exploit Products in the Field in the Territory (each, a “**New Patent Right**”). For avoidance of doubt this does not include Patent Rights and related Know-How Covering manufacturing processes outside the scope of CureVac Manufacturing Technology. Genmab shall notify CureVac within [*****] after receipt of such notice whether Genmab desires to include such New Patent Right under the licenses granted to Genmab by CureVac pursuant to Section 2.1. If Genmab notifies CureVac that Genmab desires to include such New Patent Right under the licenses granted to Genmab by CureVac pursuant to Section 2.1, then such New Patent Right is and shall be automatically included in the definitions of the CureVac Patent Rights and shall be considered within 1.199 (i) (Valid Claim) regardless of the priority date of the New Patent Right and shall be included in the licenses granted to Genmab by CureVac pursuant to Section 2.1.

3. REPLACEMENT TARGET; RESERVED TARGETS; OPTIONED TARGETS.

3.1 Replacement of the First Collaboration Target. If the pre-clinical Program with respect to the First Collaboration Target does not meet the success criteria set forth in the First Program Research Plan attached hereto as **Exhibit 5.1.1** (as may be modified by JRC), Genmab has the [*****] right, [*****] after the Effective Date, to seek to replace the First Collaboration Target by another Target (“**Replacement Target**”). Genmab shall nominate a Replacement Target by written notice to CureVac, and CureVac will then operate the clearance procedures, in accordance with Section 3.2.2. If CureVac gives written notice to Genmab that the Replacement Target is cleared and, upon written notice by Genmab that it wishes to replace the First Collaboration Target by such Replacement Target, the Replacement Target will replace the First Collaboration Target for purposes of this Agreement. Upon replacement, the Parties through the JRC will amend the First Program Research Plan as required to address any differences between the Replacement Target and the First Collaboration Target, as well as the changes in timeline resulting from the change of Target.

3.2 Target Reservation.

3.2.1 Reserved Targets and Reservation Period. During a period starting on the first anniversary of the Effective Date and ending [*****] after the Effective Date, Genmab shall have the right to exclusively reserve up to four (4) Targets or Target Combinations, in order to enable Genmab, to exercise up to three (3) options, to Develop, Manufacture and Commercialize Products against the Targets or Target Combinations, as applicable, for which the option is exercised, in addition to the Products against the First Collaboration Target or Replacement Target, as applicable. A Target or Target Combination shall become a “**Reserved Target**” or a “**Reserved Target Combination**” as applicable, upon (i) [*****], and (ii) [*****]. Such Reserved Target shall remain a Reserved Target until [*****] or such period as extended in accordance with Section 5.2.2 below (“**Reservation Period**”). If Genmab notifies CureVac that it does not wish to exercise an option with respect to a Reserved Target, latest upon expiry of the Reservation Period, the respective Target shall cease to be a Reserved Target; and upon exercise of three (3) options, any fourth (4th) Reserved Target shall cease to be such a Reserved Target.

3.2.2 Clearance of Targets. CureVac shall appoint a representative of CureVac (“**Target List Rep**”) who is a legal counsel in the legal department or IP department of CureVac or employed with an external law firm, to keep a list of all Targets and Target Combinations that are the subject of or related to any ongoing evaluation or research project of CureVac and/or in collaboration with or under option or license to any Third Party (“**Target List**”). CureVac shall provide to Genmab contact details of the Target List Rep. If Genmab wishes to reserve a Target or Target Combination, Genmab shall in writing request CureVac to perform a Target or Target Combination clearance. Clearance will be conducted in accordance with the following process: First, Genmab shall inform the Target List Rep in writing that Genmab wishes to conduct a Target or Target Combination clearance. Second, within [*****] from receipt of such information from Genmab the Target List Rep updates the Target List and confirms to Genmab that the Target List is updated. Third, Genmab shall set out details of the Target or Target Combination to the Target List Rep and within [*****] the Target List Rep shall indicate to Genmab whether the Target or Target Combination is available. If the Target or Target Combination, as applicable, is available and Genmab wishes to go ahead, Genmab shall then submit to CureVac the full sequences of the proposed Research Program Antibody(-ies) as specified in the clearance templates in **Exhibit 3.2.2**, as applicable. Unless Genmab informs CureVac that it will independently secure rights to an appropriate LNP Technology, CureVac shall within a further [*****] review and investigate whether LNP Technology for a Product based on the Target or Target Combination and proposed Research Program Antibody(-ies) is potentially available through CureVac. In connection with such review and investigation, CureVac shall be authorized to provide the full sequences of the proposed Research Program Antibody(-ies) to the in-house legal or IP counsel of the potential LNP Technology provider or an external legal or IP representative handling any gatekeeping clearance procedures that it operates, provided that the LNP Technology provider and, if applicable, its external legal or IP representative is subject to confidentiality obligations at least as stringent as the confidentiality obligations on the Parties set forth herein as well as an obligation not to disclose the sequence to any Third Party. If CureVac determines that LNP Technology for a Product based on the Target or Target Combination and proposed Research Program Antibody(-ies) is available through CureVac, it shall give notice to Genmab hereof. If CureVac cannot identify any such LNP Technology the JRC shall consider the position to recommend a way forward. The Reserved Target or Reserved Target Combination, as applicable, shall be deemed finally cleared for purposes of this Agreement, if CureVac informs Genmab that the LNP Technology is available for the respective Product(s) and related Program Antibody/Program Antibody Combination, or if Genmab waives CureVac’s obligations to support Genmab with respect to the LNP Technology under this Agreement.

- 3.2.3 Costs.** Subject to CureVac's Opt-in Right and except as otherwise stated in this Agreement, all Development costs under any Program relating to Reserved Targets shall be borne by Genmab.
- 3.3 Reservation Fee.** Within [*****] after a Target or Target Combinations becomes a Reserved Target or Reserved Target Combination, as applicable, in accordance with Section 3.2.1, Genmab shall pay to CureVac a reservation fee of US Dollars [*****] per Reserved Target or Reserved Target Combination, as applicable, ("**Reservation Fee**"), *provided, however*, that in the event the Reservation Fee has not been paid within [*****] after the date that the Target or Target Combination became a Reserved Target or Reserved Target Combination, as applicable, pursuant to Section 3.2.1, such Target or Target Combination shall no longer be reserved for purpose of this Agreement. The Reservation Fee shall be creditable against the Option Exercise Fee for the respective Reserved Target or Reserved Target Combination, in the event Genmab advances such Reserved Target or Reserved Target Combination to an Optioned Target or Optioned Target.
- 3.4 Exclusive Option.** As of the Effective Date and in consideration for the respective Option Exercise Fee as set forth in Section 10.2, CureVac hereby grants to Genmab, and Genmab hereby accepts, three (3) exclusive options for the shorter of (i) a term of [*****] after the Effective Date; or (ii) on a Reserved Target-by-Reserved Target basis, the Reservation Period ("**Option Period**"), to obtain exclusive licenses to Reserved Targets, as set forth in Section 2.1.3 above. Genmab may exercise the option under this Section 3.4 on a Reserved Target-by-Reserved Target basis by way of written notice to CureVac during the Option Period ("**Option Exercise**"). As of the date of the Option Exercise, and provided the Option Exercise Fee has been timely paid in accordance with Section 10.2 below, the Reserved Target or Reserved Target Combination shall become an "**Optioned Target**" or "**Optioned Target Combination**", as applicable. For clarity, in order to protect Genmab's exclusive option, during the Option Period the exclusivity obligations set out in Section 2.4 shall apply.

4. LNP TECHNOLOGY.

4.1 First Program Antibody. CureVac will at its own cost secure the rights to the LNP Technology required for Genmab to Develop, Manufacture and Commercialize a Single Antibody Product identified under the First Program Research Plan (whether in relation to the First Collaboration Target or a Replacement Target) with the exception of any Switching Costs which will be borne by Genmab and/or CureVac pursuant to the mechanism set forth below in this Section 4.1. The rights may be exclusive or non-exclusive, and may be under the Arcturus License, the Acuitas License or utilizing any other suitable LNP Technology of a Third Party other than Arcturus or Acuitas. CureVac shall hold the license required and, if CureVac decides to source other suitable LNP Technology, shall be responsible for (i) investigating the availability of such other suitable LNP Technology and in connection with such investigation, upon Genmab's prior written approval (not to be unreasonably withheld), CureVac shall be authorized to provide the full sequences of the First Program Antibody or Replacement Target Antibody to the in-house legal or IP counsel of the potential LNP Technology provider or an external legal or IP representative handling any gatekeeping clearance procedures that it operates on behalf of said provider, provided that the LNP Technology provider and, if applicable, its external legal or IP representative is subject to confidentiality obligations at least as stringent as the confidentiality obligations on the Parties set forth herein and, in addition, an obligation not to share the sequences with any Third Party; and (ii) negotiating and agreeing the terms for the license under the LNP Technology for the conduct of the First Collaboration Program for the First Collaboration Target and, if applicable and subject to the below in this Section 4.1 and in Section 4.2, the Replacement Target. Prior to CureVac deciding on the use of a particular LNP Technology for the First Collaboration Target that is not the LNP Technology licensed under the Arcturus License or the Acuitas License, Genmab shall have the right to review and consider all terms relevant to Genmab for such LNP Technology license, including any relevant agreements with any Third Party provider for such LNP Technology, relevant Patent Rights, and FTO reports (if any). If CureVac decides to source other suitable LNP Technology and Genmab, having considered the terms available from the provider of the LNP Technology, suggests certain amendments to such terms, CureVac will use Commercially Reasonable Efforts to obtain such amendments, but if CureVac cannot obtain such amendments, CureVac shall be entitled to proceed with such LNP Technology license for the First Collaboration Target without such amendments. For avoidance of doubt, CureVac shall not enter into any LNP Technology license other than the Acuitas License or Arcturus License for the Replacement Target without Genmab's prior written consent. In the event that the First Program Research Plan is amended to include a Replacement Target, the procedure for selection of a suitable LNP Technology set out in Section 4.2 below shall apply. CureVac shall obtain the LNP Technology license in relation to the Single Antibody Product identified under the First Program Research Plan and grant to Genmab a sublicense in the form required by the license to CureVac from the LNP Technology provider. If an LNP Technology license other than Acuitas License or Arcturus License is chosen with respect to the Replacement Target and Genmab is granted a sublicense pursuant to the procedure set out in Section 4.2, [*****] any applicable Switching Costs within [*****] of the date of CureVac invoice therefor, *provided, however*, that if the Switching Costs at a given time exceed [*****] of the total costs for such LNP Technology license, then [*****] the then current total costs for such LNP Technology license for the Replacement Target pursuant to the principles applicable to Reserved Targets and Optioned Targets set out in Section 4.3 below. Upon Genmab's reasonable request at any time following the Effective Date, CureVac shall provide to a representative of Genmab's legal department (and on the basis that such legal department representative may share such copies with other representatives of Genmab's legal department as reasonably necessary and may also summarize the contents for other Genmab stakeholders who need to know the relevant information) accurate, current and unredacted copies of (i) the Acuitas License, including any future amendments thereto and (ii) the Arcturus License, including any future amendments thereto.

4.2 Selection of LNP Technology for Replacement Target Antibody and Other Program Antibodies. Genmab shall not have the right to source the LNP Technology to be used in the First Program Research Plan for the First Collaboration Target (including any Replacement Target). Genmab may request CureVac in writing to source LNP Technology itself for use in a Reserved Target Research Plan. Subject to the below in this Section 4.2, such request shall be made by Genmab prior to submitting to CureVac the full sequences of the Research Program Antibody(ies) under Section 3.2.2. For avoidance of doubt, in such eventuality CureVac shall have no responsibility to source such LNP Technology. Absent such a notice from Genmab CureVac shall use Commercially Reasonable Efforts to ensure the availability of license rights to an LNP Technology which is suitable for the Development, Manufacture and Commercialization of Products Research Program Antibody(ies) in accordance with this Agreement. Such rights may be non-exclusive. As part of the clearance procedures under Section 3.2.2 (including as a result of the provisions of Section 3.1 in relation to a Replacement Target) CureVac will present a proposal to Genmab identifying the LNP Technology CureVac suggests is used and is available for in-licensing, considering Genmab's preference for either an exclusive or non-exclusive license to the LNP Technology. As part of this process CureVac shall evaluate LNP Technologies it has been working with in the past with respect to both their suitability and availability for the respective Replacement Target Antibody or Research Program Antibody(ies). Genmab and CureVac shall consider together the options for LNP Technology to be used at the JRC, including if a new license is required, whether CureVac should hold the license and sub-license to Genmab (with the exception of a license for Product related to the Replacement Target where CureVac shall hold the license and sublicense to Genmab), or whether each Party should hold whatever licenses it requires. CureVac shall be responsible for negotiating and agreeing the terms for the license under the LNP Technology for the conduct of the Development of Products based on the Replacement Target Antibody or Research Program Antibody(ies) and the Commercialization of Products arising therefrom. In the case of the Replacement Target Antibody or the Research Program Antibody(ies) prior to finalizing any such new license for a particular LNP Technology to be used in relation to a First Collaboration Program (for the Replacement Target) or a Research Program, Genmab shall have the right to review the terms and conditions of a license of the respective LNP Technology, including the license agreement with a Third Party, whether an exclusive and non-exclusive is available, the financial terms (identifying the separate fees for an exclusive and non-exclusive license), the Patent Rights under the LNP Technology, FTO reports (if any), and other documentation the JRC may consider relevant for the selection of an LNP Technology ("**LNP Technology License Documentation Package**"). For clarity, CureVac will not guarantee that a suitable LNP Technology will be available for any Program except the First Collaboration Program based on the First Program Antibody. Within [*****] of receipt by Genmab of a complete LNP Technology License Documentation Package under Section 5.2.2, Genmab shall indicate by written notice to CureVac (i) whether or not Genmab agrees to take sub-license rights to the LNP Technology on the terms specified in the LNP Technology License Documentation Package; and, if it so agrees (ii) whether the license rights should be non- exclusive or exclusive, if both such options are available. If Genmab agrees to take sub-license rights, CureVac shall obtain the license and grant to Genmab the sublicense in the form required by the license to CureVac from the LNP Technology provider as specified in the LNP Technology License Documentation Package and approved in advance by Genmab. If Genmab does not agree to take sub-license rights to the LNP Technology on the terms specified in the LNP Technology License Documentation Package, then with the exception of LNP Technology being licensed in relation to Product based on the Replacement Target, Genmab shall have the right to source LNP Technology itself.

4.3 LNP Technology License Fees. Subject to the provisions of Section 4.1 concerning Switching Costs the license fees under any LNP Technology for use in relation to the first Product directed against the First Collaboration Target or Replacement Target, as applicable, are included in the license fees under this Agreement and CureVac shall thus be solely responsible for all and any payments related to the LNP Technology for use in relation to such first Product. With respect to Reserved Targets and Optioned Targets, and save where Genmab seeks to source the LNP Technology license directly from the provider (in which case Genmab shall be responsible for [*****] of all license fees), all license fees to be paid for the rights to the respective LNP Technologies to the Third Party licensor of the respective LNP Technologies (whether signature fees, annual fees, milestone payments or royalties) shall be [*****] shared by Genmab and CureVac to the extent that such payments relate only to a license of rights for the Development, Manufacturing or Commercialization of a Research Program Antibody and any subsequent Other Program Antibody and/or the related Product. If the license fees (for example an upfront or signature fee) cover license rights to several potential products but will be used for a Product, [*****]. The [*****] amount shall be judged at the time of any payment by CureVac under the license, and shall be calculated by reference to (i) the [*****] at that time; and (ii) in comparison to the number of products under research or development by CureVac or any licensee of CureVac at that time and/or, if applicable, product slots (license options) capable of use by CureVac. For illustration purposes only, [*****]. Notwithstanding the above, if Genmab in its sole discretion elects that the Parties should obtain an exclusive license although a non-exclusive license was available at the same time, [*****] *provided, however,* that if the Parties agree that an exclusive license to LNP Technology is to be obtained for any Opt-In Product the full costs for such exclusive license shall be [*****]. In cases where CureVac is the licensee under the LNP Technology license, CureVac shall invoice Genmab for Genmab's share of the license fees to a licensor of LNP Technology as and when such fees fall due. If Genmab is the licensee, it shall invoice CureVac for its share of license fees as and when such fees fall due. For clarity, if CureVac obtains the license to the LNP Technology, and grants a sublicense to Genmab, the [*****] of all license fees for a non-exclusive license shall be a pass through license fee, without any mark-up for the benefit of CureVac. For further clarity, if Genmab waives CureVac's obligation to support Genmab with respect to the LNP Technology under this Agreement, CureVac shall have no obligation to share in the license fees payable to a licensor of LNP Technology.

5. RESEARCH AND DEVELOPMENT COLLABORATION.

5.1 First Collaboration Target, and First Program Antibody.

5.1.1 **Research Collaboration on the First Collaboration Target.** The Parties shall jointly collaborate on the preclinical Development of the First Collaboration Target and First Program Antibody with the objective to identify and take a Product to IND stage (“**First Collaboration Program**”). The initial preclinical Development plan is attached hereto as **Exhibit 5.1.1**. It contains an outline of the activities to be performed by each Party, a budget for the research activities calculated by reference to the FTE Rate, success criteria, a target product profile and a high level Development plan up to IND for a Single Antibody Product, and may be amended from time to time by the JRC subject to the mechanisms in Section 9.5.1 (“**First Program Research Plan**”). CureVac will on a quarterly basis, within [****] days after receipt of an invoice from Genmab, refund Genmab [****] of the actual Development costs of Genmab [****] as set forth in the then current First Program Research Plan by more than [****] and subject always to the mechanisms in Section 8.5.1, *provided, however* that in the event Genmab replaces the First Collaboration Target by a Replacement Target, and the JRC amends the First Program Research Plan accordingly, [****].

5.1.2 **Information Exchange.** Following completion by CureVac and Genmab of the activities assigned to them in the First Program Research Plan, each Party shall provide the JRC with a data package containing all Development Data and other information necessary for Genmab to decide whether it will continue the Development of any Product identified in the First Program Research Plan by filing an IND and conducting Clinical Studies. The content of the data package, as well as criteria for evaluation and selection of a candidate for Product Selection, shall be determined by the JRC and is expected to include, inter alia, (i) *in vivo* PK and efficacy data, i.e., toxicology and any animal data; and (ii) CMC Development data. In addition, CureVac shall provide the LNP Technology License Documentation Package for the First Collaboration Program.

5.2 Research and Development of Reserved Targets and Other Program Antibodies.

5.2.1 Reserved Target Research Plan. Once any Target or Target Combination, as applicable, has been finally cleared by CureVac under Section 3.2.2, Genmab shall, with CureVac providing adequate input and support, as soon as practicable, and in any event within [*****] under Section 3.2.2, provide a research plan to the JRC for discussion, which sets forth the contemplated nonclinical Development activities to be carried out by each Party during the Reservation Period to identify a Product such that Genmab may wish to undertake Option Exercise, and a budget for activities to be performed by CureVac calculated by reference to the FTE Rate, and including a preliminary target product profile (TPP) for such a Product based on the full antibody sequences of the proposed Research Program Antibody(-ies) and selected LNP Technology (“**Reserved Target Research Plan**”). The Reserved Target Research Plan shall include an overview of the studies and key data sets which should be included in the Reserved Target Data Package. The date for completion of the Reserved Target Research Plan shall be set to [*****] after the date of the JRC’s or CDOs’, as applicable, approval of the Reserved Target Research Plan if it relates to a Single Antibody Product, and [*****] after the date of the JRC’s or CDOs’, as applicable, approval of the Reserved Target Research Plan if it relates to a Cocktail Product (“**Research Completion Deadline**”) unless the Parties mutually agree to a different completion date. The Reserved Target Research Plan shall not include any IND-enabling or GxP Development activities. The Reserved Target Research Plan shall be discussed in the JRC and the JRC shall seek to approve the Reserved Target Research Plan within [*****] after final clearance of the Reserved Target or Reserved Target Combination in accordance with the clearance procedure set out in Section 3.2.2 above. At the expiry of such [*****] if the JRC has not approved the Reserved Target Research Plan, any remaining unresolved items regarding activities to be performed by or on behalf of CureVac or that fall within the scope of Sections 9.5.1(i) to 9.5.1(iii) (inclusive), where Genmab does not have final decision-making in the JRC, shall be referred to the Alliance Managers for resolution. If the Alliance Managers facilitate resolution of all issues by the JRC members, the Reserved Target Research Plan shall be sent back to the JRC for immediate JRC approval. If within [*****] of such referral to the Alliance Managers the Reserved Target Research Plan is still not approved, the dispute shall be deemed automatically referred to the CDOs. If within [*****] of such referral the Reserved Target Research Plan is still not approved by the CDOs, no further action under this Section 5.2.1 shall be required and the relevant Target or Target Combination shall not be designated a Reserved Target or Reserved Target Combination, as appropriate, and, for avoidance of doubt, the dispute resolution mechanisms set forth in Section 17.5.2 shall thus not apply. For clarity, this would not prevent Genmab from initiating a new reservation process under Section 3.2.1. For avoidance of doubt, any Reservation Period shall not commence until the JRC (or the CDOs, as applicable) have approved the related Reserved Target Research Plan.

5.2.2 Data Package. On a Reserved Target-by-Reserved Target basis, as soon as reasonably possible following completion of the activities under the applicable Reserved Target Research Plan, which shall, subject to the below, be completed by the Research Completion Deadline, the Parties shall provide the JRC with a data package containing the Development Data generated under the Reserved Target Research Plan and other information necessary for Genmab to evaluate its interest exercising an option with respect to the Reserved Target (“**Reserved Target Data Package**”). In addition to the Reserved Target Data Package, CureVac shall at the same time provide the LNP Technology License Documentation Package to Genmab. If the Parties cannot reasonably provide such complete Reserved Target Data Package, or if CureVac is unable to provide the LNP Technology License Documentation Package, or if certain activities in the Reserved Target Research Plan are delayed, by the Research Completion Deadline, and unless the Parties mutually agree an extension of the Research Completion Deadline and the Reservation Period (such agreement not to be unreasonably withheld if there are outstanding Development activities required under the Reserved Target Research Plan), the Reservation Period shall be extended to allow Genmab to evaluate its interest in exercising an option pursuant to Section 3.4 by the shorter of (i) [*****] after receipt by the JRC of the complete Reserved Target Data Package and LNP Technology License Documentation Package; or (ii) [*****] after the commencement of the Reservation Period where the corresponding Reserved Target Research Plan relates to a Single Antibody Product and [*****] after commencement of the Reservation Period where the corresponding Reserved Target Research Plan relates to a Cocktail Product.

- 5.2.3 Other Pre-IND Program Research Plan.** On an Optioned Target-by-Optioned Target basis, within [*****] after the Reserved Target becomes an Optioned Target pursuant to Section 3.4, Genmab will provide a draft Development plan for a Product directed at the respective Optioned Target up to IND stage which sets forth the detailed Development activities to be performed by each Party up to filing of IND for such Product, a budget for activities to be performed by CureVac calculated by reference to the FTE Rate, success criteria, and a preliminary target product profile (“**Other Pre-IND Program Research Plan**”). Such Other Pre-IND Program Research Plan will be discussed and agreed in the JRC, and requires approval by CureVac with respect to any activities to be undertaken by CureVac pursuant to such Other Pre-IND Program Research Plan.
- 5.3 Product Selection.** When under (i) the First Program Research Plan (whether directed at the First Collaboration Target or a Replacement Target); or (ii) any Reserved Target Research Plan or Other Pre-IND Program Research Plan Genmab determines that a Product has been identified which it is selecting as a clinical candidate to conduct the remaining pre-IND Development activity and, if the same is successful, further Development through Clinical Studies and any further non-clinical Development, Genmab shall give written notice to CureVac of this fact (“**Product Selection Notice**” and “**Product Selection**” as appropriate). In such case, and within [*****] Genmab will either (i) in the case of a Product resulting from the First Program Research Plan provide to CureVac a detailed Development plan for such Product to reach IND together with an outline (high-level) Development Plan for such Product to reach Regulatory Approval (in the form of marketing authorization). Genmab will allow CureVac to comment on Manufacturing related matters in the Development plan for the Product to reach IND, such reasonable comments to be reflected by Genmab in a revised version of such Development Plan; or (ii) in the case of a Product resulting from an Other Pre-IND Program Research Plan Genmab shall provide to CureVac an outline (high-level) Development plan for such Product to reach Regulatory Approval (in the form of marketing authorization), (the plans at (i) and (ii) all being a “**Product Development Plans**”).
- 5.4 Diligence by CureVac.** CureVac will act in good faith, using Commercially Reasonable Efforts, to perform its assigned tasks and responsibilities as described in the R&D Plans, and in accordance with all Applicable Laws. With respect to any Opt-In Target and Opt-In Product, CureVac shall use Commercially Reasonable Efforts to further Develop the Opt-In Product to market authorization and to Commercialize the Opt-In Product.
- 5.5 Diligence by Genmab.** Genmab will use Commercially Reasonable Efforts to identify and Develop a Product during the First Collaboration Program and each Research Program; and, upon Product Selection or Option Exercise, as applicable, to further Develop each Product until market authorization. Further, Genmab shall use Commercially Reasonable Efforts to Commercialize each Product for which it obtains Regulatory Approval.

- 5.6 Development Data, Results and records.** Up until filing of IND, the Parties will with reasonable intervals make available to one another through formal reports for review and discussion within the JRC all preclinical Development Data and other results of the preclinical Development conducted pursuant to any Program, and will keep such records (paper and electronic) as described herein. The Parties will maintain records of the preclinical Development Data and other results in sufficient detail as required from Regulatory Agencies and in good scientific manner appropriate for patent purposes, and in a manner that properly reflects all work done and results achieved in the performance of such Programs.
- 5.7 Development by CureVac.** CureVac will perform certain activities as agreed between the Parties and set forth in the R&D Plans. Subject only to the funding obligations of CureVac set forth in Section 5.1.1 above, [*****] at the FTE Rate. In addition to the FTE Rate, [*****]. The compensation is to be paid [*****] on a Calendar Quarter basis. Payments shall be made and within [*****] after receipt of an invoice, with supportive documentation detailing the FTE costs and out of pocket expenses applicable to CureVac's efforts for such applicable Calendar Quarter period.
- 5.8 Materials.** CureVac will furnish to Genmab CureVac Materials for Development use in the Programs, including those which comprise, embody or incorporate CureVac Background Technology, as expressly set forth in the respective R&D Plan. In particular, CureVac will provide to Genmab the CureVac Materials as set forth in **Exhibit 5.1.1**. Genmab will furnish to CureVac Materials for research and Development use in the Programs, including those which comprise, embody or incorporate Genmab Background Technology, as expressly set forth in the respective R&D Plan. In particular, Genmab will provide to CureVac the Genmab Materials as set forth in **Exhibit 5.1.1**. Genmab will use the CureVac Materials and CureVac will use the Genmab Materials, as applicable (i) only in accordance with the R&D Plans and otherwise in accordance with the terms and conditions of this Agreement; (ii) not in human subjects, in clinical trials, or for diagnostic purposes involving human subjects, or for any animal studies, except as expressly provided for in R&D Plans; and (iii) not reverse engineer or chemically analyze the same except as expressly provided for (if at all) in R&D Plans. The Materials will remain the sole property of the Party supplying them and will be used by the recipient Party in compliance with all Applicable Laws and only to perform activities set forth in R&D Plans. The receiving Party shall not sell, transfer, disclose or otherwise provide access to the other Party's Materials without the written consent of the providing Party, except that the receiving Party may allow access to the other Party's Materials to its and its Affiliates' employees, officers, consultants, subcontractors and Sublicensees who require such access to perform its activities under this Agreement and solely for purposes consistent with this Agreement; provided that such employees, officers, consultants, subcontractors and Sublicensees are bound by agreement to retain and use the Materials in a manner that is consistent with the terms of this Agreement. THE MATERIALS ARE PROVIDED "AS IS". NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF ANY KIND, ARE GIVEN BY THE PROVIDING PARTY WITH RESPECT TO ANY OF THE MATERIALS, INCLUDING THEIR CONDITION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The receiving Party acknowledges the experimental nature of the Materials and that accordingly, not all characteristics of the Materials are necessarily known. Upon termination or expiration of this Agreement if earlier, any and all remaining Materials will, within [*****] after such event, be returned to the Party supplying them (or destroyed, if the supplying Party shall so specify, with such destruction confirmed in writing). The provision of Materials hereunder will not constitute any grant, option or license to or under such Materials, or any Patent Rights or Know-how of the supplying Party, except as expressly set forth herein.

5.9 Delays in Performance of Non-Clinical Development Activities. If, during the performance of any of the Programs, a Party reasonably believes that such Program cannot be performed in accordance with the respective R&D Plan (excluding the Product Development Plans, for which the obligations in this Section 5.9 shall not apply), such Party shall inform the JRC thereof. To the extent a Party reasonably believes that certain amendments to the R&D Plan (excluding the Product Development Plans) are necessary or advisable, such Party shall notify the JRC of such Party's proposed amendments and the JRC shall review such proposed amendments and consider an update of the respective R&D Plan. The JRC can only amend any Reservation Period or Research Completion Deadline with consensus (i.e. Genmab shall not have casting vote in such matter).

5.10 Regulatory Approvals of Product.

5.10.1 Filing. Genmab shall prepare and file all INDs and NDAs and own all Regulatory Approvals and be responsible for all decisions in connection therewith for Regulatory Approvals of Products in the Field and in the Territory; *provided, however*, that for the First Collaboration Program (with respect to the First Collaboration Target but not the Replacement Target if applicable) CureVac shall review and comment on the portions of the first IND related to the Product where CureVac Manufacturing Technology such as CMC data is included in such IND filing. Such review shall be conducted at the agreed FTE Rate and subject to the agreed cost [*****]. For subsequent filings of the Product from the First Collaboration Program and for all other Products, upon CureVac's request Genmab will to the extent reasonably possible allow CureVac at CureVac's own cost to review and comment on (i) the portions of regulatory filings related to Products where CureVac Manufacturing Technology such as CMC data is included in such filings, and (ii) safety related documents. Genmab will take into good faith consideration any such comments provided by CureVac within [*****] of CureVac's receipt of such draft filings. Notwithstanding the above, to the extent that Genmab requests CureVac to review any regulatory filing and safety related documents, [*****]. CureVac shall cooperate in these efforts as reasonably requested by Genmab, including by providing any CureVac Manufacturing Know-How reasonably required by Genmab for such Regulatory Approvals.

5.10.2 Cross Referencing. To the extent reasonably required by Genmab to achieve or maintain regulatory clinical trial or marketing authorizations or to comply with any related requests from Regulatory Agencies related to the Products, CureVac shall authorize and hereby authorizes Genmab, its Affiliates and Sublicensees to cross-reference sections of other IND/regulatory dossiers of clinical trials or marketing authorizations of other products Controlled by CureVac and to any other relevant regulatory filings and any other relevant documentation Controlled by CureVac. Genmab shall inform CureVac in writing prior to any such cross-referencing. If CureVac desires to cross-reference sections of the IND/regulatory dossiers of the clinical trials or marketing authorizations related to the Products, Genmab shall consider such request in good faith and not unreasonably withhold its consent to such cross-referencing by CureVac.

- 5.10.3 Communications.** Genmab shall have the sole right and be responsible for all regulatory interactions, including written communications and meetings with Regulatory Agencies, and safety management, including the reporting to the appropriate governmental authorities of all adverse events and any other information concerning the safety of Products. Prior to IND filing for a Product, Genmab will, as part of its regular updates through the JRC, inform CureVac of any material feedback from Regulatory Agencies relating to any Product. CureVac shall promptly notify Genmab in writing within [*****] of unannounced inspections by any Regulatory Agency and within a reasonable time in advance of an announced regulatory inspection with respect to Development, Manufacturing or Commercialization of a particular Product.
- 5.10.4 Diligence (Regulatory).** Genmab will use Commercially Reasonable Efforts to seek Regulatory Approval for the Products in the Field in the Major Market Countries.
- 5.10.5 Global Safety Database.** Genmab shall establish, hold (in-house or via an external vendor), and maintain the global safety database for Products with respect to information on adverse events concerning the Products, as and to the extent required by Applicable Law. If (a) any suspected unexpected serious adverse reactions (SUSAR) or any reportable serious adverse events (SAEs) may, in Genmab's reasonable opinion, have a material impact on the Development of a Product or (b) a public announcement has to be made with respect to a SUSAR or SAE related to a Product, then in each case Genmab shall promptly notify CureVac in writing. If a public announcement has to be made with respect to any SUSAR or SAE related to a Product, Genmab shall, to the extent reasonably possible and provided that this can be done without risk of non-compliance with Applicable Law (including securities laws and stock exchange rules), notify CureVac thereof at least [*****] prior to making such public announcement to give CureVac an opportunity to comment.
- 5.11 Subcontracts.** Subject to the terms and conditions of this Agreement, the Parties may subcontract to Affiliates and Third Parties, including CROs and CMOs, portions of the Programs to be performed. Any subcontractor shall be required to enter into appropriate agreements with respect to non-disclosure of Confidential Information and ownership of any intellectual property developed in the course of subcontracted activities, unless such subcontracting would not require the transfer of the other Party's Confidential Information to the Affiliate or Third Party subcontractor and there is no reasonable possibility of the creation of new intellectual property. Each subcontractor shall agree to reasonable audit rights. Each Party shall remain liable to the other Party for any act or omission of its subcontractor. Any subcontractor of CureVac shall be subject to Genmab's prior written consent, such consent not to be unreasonably withheld. **Exhibit 5.11** contains a list of CureVac's subcontractors which are approved for purposes of this Agreement, subject to the above. Genmab consents to the appointment of CureVac's Affiliate company CureVac Real Estate GmbH as a subcontractor of CureVac for the purpose of Manufacturing Products under this Agreement and the Early Clinical Supply Agreement for the supply of Products to be used in Clinical Phase I Studies with respect to the First Collaboration Program (as opposed to any future Manufacture under future supply agreements that might be agreed between the Parties). Should CureVac Real Estate GmbH at any time no longer be an Affiliate of CureVac, CureVac shall inform Genmab of the details concerning the new structure, decision making and other relevant items of CureVac Real Estate GmbH. CureVac shall further ensure and confirm in writing to Genmab that as a result of CureVac Real Estate GmbH no longer being an Affiliate of CureVac there are no material changes, including no cost or timeline changes, that may affect Genmab with respect to the terms or operation of any then current supply agreement between the CureVac AG and CureVac Real Estate GmbH.

6. MANUFACTURING AND COMMERCIALIZATION

- 6.1 Manufacture of Products.** Manufacture by CureVac of Products for use in preclinical activities during the Research Period will take place under the First Program Research Plan, the Reserved Target Research Plan and the Other Pre-IND Program Research Plans, as the case may be. For the supply of Products to be used in Clinical Phase I Studies with respect to the First Collaboration Program (including in relation to a Product based upon a Replacement Target Antibody), subject to Section 6.2, the Parties shall negotiate and enter into a clinical supply agreement under which CureVac shall Manufacture or have Manufactured such Products on Genmab's behalf. For the supply of Products to be used in Clinical Phase I Studies with respect to any other Pre-IND Program, the Parties will on a Product-by-Product basis negotiate an amendment to the Early Clinical Supply Agreement in good faith, subject to Section 6.2, whereby CureVac shall Manufacture or have Manufactured such Product on Genmab's behalf. For other Manufacture of Products, CureVac shall have the right to provide an offer to Genmab to Manufacture Product under the provisions of Section 6.4.
- 6.2 Early Clinical Supply Agreement.** Within [*****] after the Effective Date, the Parties will enter into a clinical supply agreement and related agreements (including a quality agreement) according to which CureVac shall Manufacture or have Manufactured for Genmab by an approved subcontractor under Section 5.11 or by a CMO approved by Genmab, and will supply or have supplied to Genmab, Genmab's demand for the Single Antibody Product which is the subject of the First Program Research Plan (whether related to the First Collaboration Target or any Replacement Target) to perform Clinical Phase I Studies ("**Early Clinical Supply Agreement**"). The Early Clinical Supply Agreement and related quality agreement will contain the key terms and conditions set forth in **Exhibit 6.2**. The Early Clinical Supply Agreement and the related quality agreement with respect thereto, shall determine, in accordance with Applicable Law, all Product quality standards for such Product to be used in clinical trials, including but not limited to stability, validation and pre-approval inspection preparation, specifications, assay methodology, facilities, equipment and storage conditions. With respect to the First Collaboration Program, if CureVac is unable to provide capacity via its own facilities or that of its approved subcontractor under Section 5.11 or another approved CMO within the agreed timelines, Genmab shall have the right to Manufacture and have Manufactured Products for Genmab for Genmab's Clinical Phase I Studies as well as in connection with Genmab's (or its Affiliates' or Sublicensees', as applicable) Manufacture of Products for Development and Commercialization by another supplier. In such event, CureVac shall transfer all CureVac Manufacturing Technology to such supplier of Genmab in accordance with Section 6.5 and any applicable terms of the Early Clinical Supply Agreement. In connection with the negotiation of the Early Clinical Supply Agreement, the Parties will agree on a plan for the transfer of CureVac Manufacturing Technology to Genmab, including estimated timelines, scope, resources and other relevant details (the "**Tech Transfer Plan**"). Such Tech Transfer Plan may be updated from time to time by mutual written agreement between the Parties, including in the event that the Parties negotiate an MSA pursuant to Section 6.4.2.

6.3 With respect to Other Pre-IND Programs and related Products, on a Product-by-Product basis, no later than [*****] prior to the anticipated commencement of Clinical Phase I Studies for such Product CureVac shall notify Genmab and inform Genmab whether CureVac or any approved subcontractor under Section 5.11 or other approved CMO already Manufacturing under the Early Clinical Supply Agreement has the capacity to Manufacture such Product for use in Clinical Phase I Studies within the timelines requested by Genmab. If CureVac gives notice that such capacity exists, the Parties will negotiate in good faith amendments to the Early Clinical Supply Agreement and related quality agreement to cover the Manufacture by CureVac or such approved subcontractor or approved CMO of such additional Product (arising from the relevant Other Pre-IND Program Research Plan) for use in Genmab's Clinical Phase I Studies for such Product. If CureVac is unable to provide capacity to Manufacture such Product via its own facilities or that of its approved subcontractor or approved other CMO within the requested timelines, or the Parties are unable to agree on an amendment to the Early Clinical Supply Agreement with respect to such Product despite using good faith efforts to negotiate such amendment to the Early Clinical Supply Agreement, Genmab shall have the right to Manufacture and have Manufactured such Product for Genmab for Genmab's Clinical Phase I Studies by another supplier. In such event, CureVac shall transfer all Know-How comprised in the CureVac Manufacturing Technology as reasonably required to Manufacture such Product to such supplier of Genmab in accordance with Section 6.5 and the applicable terms of the Early Clinical Supply Agreement.

6.4 Other Manufacture of Products for Development and Commercialization

6.4.1 In relation to each Product, provided that CureVac has Manufactured and supplied such Product for use in Genmab's Clinical Phase I Studies, then no later than [*****] prior to a requirement of Genmab for supplies of such Product for the first Clinical Phase II Study for such Product, Genmab shall submit to CureVac its non-binding forecast quantities, proposed delivery schedule for such Product quantities and other relevant criteria. Within [*****] of receipt of such forecast, CureVac shall indicate to Genmab if CureVac is able to supply such quantities (whether Manufactured by CureVac itself or an approved subcontractor or other approved CMO) in accordance with the criteria provided by Genmab; and proposed pricing and other high-level terms for such supply, which may include a proposal that any such approved subcontractor or approved CMO contract directly with Genmab.

6.4.2 If Genmab declines to appoint CureVac, its approved subcontractor or other approved CMO, it shall give written notice to CureVac specifying in high-level the reasons why CureVac itself or an approved subcontractor or other approved CMO was not appointed to Manufacture the Product. If Genmab accepts the proposal made by CureVac for supplies of Product for the first Clinical Phase II Study and is agreeable to appoint CureVac, the Parties shall within [*****] negotiate in good faith a master services agreement (“MSA”) and related quality agreement and a first work order for the Manufacture and supply of such Product quantities, Manufactured to the specifications specified by Genmab, and for payment [*****] on customary market-based terms. Any such MSA shall contain detailed provisions for tech transfer of the Manufacturing process, e.g. in the event of a failure to supply by CureVac or its approved subcontractor or approved CMO or upon Genmab's request. If Genmab does not accept the proposal made by CureVac or if the Parties are unable to reach agreement on the MSA within the above period despite exercising good faith efforts, Genmab shall have the right to choose another CMO to Manufacture the Products for Genmab. If, during Genmab's negotiation of a supply agreement with another CMO, Genmab changes the criteria for such supply as were presented to CureVac, then Genmab will provide such updated criteria to CureVac so that CureVac can provide an updated proposal.

6.4.3 The process described in Sections 6.4.1 and 6.4.2 shall apply equally to the following circumstances (i) where CureVac itself or an approved subcontractor or other approved CMO have Manufactured Genmab's requirements of a Product for Clinical Phase II Studies, in relation to Genmab's requirements of such Product for Clinical Phase III Studies; and (ii) where CureVac itself or an approved subcontractor or other approved CMO have Manufactured Genmab's requirements of a Product for Clinical Phase III or Pivotal Studies, in relation to Genmab's requirements of such Product for Commercialization.

6.5 **Transfer of CureVac Manufacturing Technology.** If (i) pursuant to the terms of this Agreement, the Early Clinical Supply Agreement and/or the MSA CureVac and/or its approved subcontractor or other approved CMO is obliged to transfer to Genmab or a CMO nominated by Genmab (which CMO shall fulfill the criteria specified in Section 6.6) the Know-How comprised in the CureVac Manufacturing Technology for the particular Product affected; or (ii) under Section 6.2 or Section 6.4 Manufacture is not going to be conducted by CureVac or its approved subcontractor or other approved CMO for a particular Product, then (in each of (i) and (ii)) CureVac and/or its approved subcontractor or other approved CMO shall as soon as reasonably possible, and in accordance with the applicable Tech Transfer Plan and the timelines set out therein transfer to Genmab, or a CMO nominated by Genmab (which CMO shall fulfill the criteria specified in Section 6.6) the Know-How comprised in the CureVac Manufacturing Technology required to Manufacture the particular Product so that Genmab, an Affiliate or the appointed Third Party CMO can take over Manufacture of such Product for Genmab. If the particular Product has been Manufactured by CureVac's approved subcontractor or other approved CMO, then CureVac shall see to it that the technology transfer shall also comprise all and any Know-How Controlled by such party that is required to Manufacture such Product. In the event of a technology transfer, the JRC or Collaboration Committee, as applicable, shall establish a Manufacturing Tech Transfer Sub-Committee, which shall oversee the tech transfer relating to such Product, subject to applicable provisions in the Early Clinical Supply Agreement or MSA regarding tech transfer and the applicable Tech Transfer Plan. CureVac shall use Commercially Reasonable Efforts to make available key employees with respect to carry out the Tech Transfer Plan and to provide the support needed to enable Genmab, or its designated CMO, to take over the Manufacture of the relevant Product. Such tech transfer for any particular Product shall only be carried out once, to representatives of the entity nominated by Genmab. Genmab will compensate CureVac and/or its approved subcontractor or other approved CMO for such tech transfer support work provided by CureVac and/or the approved subcontractor or other approved CMO at the FTE Rate. CureVac shall be responsible for ensuring that its approved subcontractor or other approved CMO complies with all and any obligations applicable to CureVac and/or the subcontractor or other approved CMO with respect to such technology transfer.

6.6 Third Party CMOs. If under Section 6.2 or Section 6.4 Genmab wishes to engage a Third Party CMO to Manufacture Products it must provide notice of such intent and the identity of the CMO to CureVac. If such Third Party CMO is (i) a direct competitor of CureVac within the field of development of mRNA-based products (such as, but not limited to, [*****]); or (ii) located inside [*****] at the time when Genmab wishes to engage such Third Party CMO, then Genmab's engagement of such Third Party CMO to Manufacture Products requires CureVac's prior written consent not to be unreasonably withheld. Upon Genmab's request, in the event of (i) or (ii) above, CureVac shall within [*****] of receipt of such request notify Genmab if CureVac opposes to Genmab's engagement of such Third Party CMO and otherwise CureVac shall be deemed to have consented to such engagement. If, in the event of (i) or (ii) above, CureVac consents to the appointment of such CMO nominated by Genmab, such consent may be conditional upon the Third Party CMO entering into direct undertakings with CureVac for the protection of Confidential Information and Know-How within CureVac Manufacturing Technology. For clarity, such CMO shall not be permitted to transfer any such Know-How to any other Third Party. For avoidance of doubt, Genmab shall not be required to obtain the prior consent of CureVac before engaging a Third Party CMO as allowed for under Section 6.2 and Section 6.4 if such Third Party CMO is not comprised by (i) or (ii) above.

6.7 Commercialization of Products. Subject only to the terms and conditions applying to the Opt-In Product, Genmab shall have all rights and responsibilities, and shall bear all costs associated with, the Commercialization of Products and will book all sales of Products. Genmab will use Commercially Reasonable Efforts to Commercialize each Product in the Major Market Countries where it obtains Regulatory Approval. In addition to the royalty reports provided by Genmab to CureVac under Section 10.6, beginning with the First Commercial Sale of the first Product and continuing, on a Product-by-Product basis, until expiry of the last Valid Claim, Genmab shall provide CureVac, at least [*****] with a written report summarizing the current status of, estimated timeline and high-level commercialization plans for the Commercialization of any Products.

7. CUREVAC'S OPT-IN AND CO-PROMOTION RIGHTS.

DEVELOPMENT & COMMERCIALIZATION OF OPT-IN PRODUCTS.

7.1 Opt-In. Subject to the terms and conditions of this Agreement, CureVac has the option to join Genmab [*****] [*****] on the Development, Manufacture and Commercialization of any [*****] Product that is a Cocktail Product, at CureVac's sole election ("**Opt-In**"). If within [*****] of Genmab's Option Exercise with respect to such Reserved Target Combination (then an Optioned Target Combination) which might result in a Cocktail Product, CureVac requests to receive an Opt-In Data Package (as defined below), Genmab shall within [*****] of such Option Exercise supply CureVac with (i) a comprehensive preclinical data package generated under the respective Program, including all Development Data available at such time; and (ii) a high-level draft Development plan (specifying in high-level the contemplated Clinical Studies and non-clinical studies to be conducted) up until and including contemplated Clinical Phase I Studies; and (iii) a proposed budget of costs, internal and external, for the draft Development Plan, and (iv) a copy of the documentation (with any reasonably required redactions, including redactions to exclude information not directly related to the Product data such as information from Genmab's board of directors, financial information etc.) provided to Genmab's portfolio board as basis for Genmab taking the decision to undertake Option Exercise in relation to the relevant Cocktail Product ("**Opt-In Data Package**"). Within [*****] of receipt of the Opt-In Data Package, CureVac shall notify Genmab whether or not CureVac wishes to Opt-In. Upon CureVac's Opt-In and payment of the Opt-In Fee in accordance with Section 10.3 below, the Optioned Target Combination will become an "**Opt-In Target**" and any Product resulting therefrom will be an "**Opt-In Product**". If CureVac requests an Opt-In Data Package the Option Exercise Fee under Section 10.2 shall be deferred until [*****] after CureVac has given Genmab notice under this Section 7.1, that CureVac is not exercising its right to Opt-In. For avoidance of doubt, if CureVac does not request any Opt-In Data Package within [*****] of the Option Exercise, Genmab shall have no obligation to provide such Opt-In Data Package and CureVac shall no right to Opt-In with respect to the particular Cocktail Product.

- 7.2 **Joint Steering Committee.** Within [*****] of CureVac Opt-In under Section 7.1 the Parties will establish a Joint Steering Committee as set out in Section 9.9 (“**Joint Steering Committee**”) which shall oversee the Development and Commercialization of the Opt-In Product. A first task of the Joint Steering Committee shall be to discuss any potential update to the Development plan submitted by Genmab to CureVac for the Opt-In Product. Until the Joint Steering Committee agrees on such update, the Development plan submitted by Genmab shall be the Opt-In R&D Plan (“**Opt-In R&D Plan**”)
- 7.3 **Opt-In Product – general principle for sharing of costs and profit.** With respect to any Opt-In Target and Opt-In Product, all costs for the Development, Manufacturing and Commercialization of the Opt-In Product, as well as all profits generated by exploiting such Opt-In Product in the Field and in the Territory (including Net Sales and payments from Third Party licensees) will be [*****].
- 7.4 **Opt-In Product – sharing of Development and Manufacturing costs.** Unless otherwise agreed in the Joint Development and Manufacturing Agreement, then the below shall apply with respect to sharing of Development and Manufacturing costs with respect to an Opt-In Product. Within [*****] of the end of each Calendar Quarter during Development of the Opt-In Product, each Party shall notify the other Party in writing of the Development and Manufacturing costs incurred by them and their Affiliates in that Calendar Quarter. Within [*****] thereafter the Parties shall agree a reconciliation such that [*****] the total costs for the Development and Manufacturing [*****], and the Party which has paid less than its [*****] share shall pay to the other Party the balancing amount required so that such total costs have been [*****]. Records and audit provisions the same as Section 10.8 shall apply to such Development and Manufacturing Costs.
- 7.5 **Co-Promotion and Co-Commercialization.** [*****] in the [*****] with CureVac having a right to co-promote up to [*****] of the sales effort, provided that upon Genmab’s prior written consent (which Genmab may give or withhold at its sole discretion) from the commencement of such Commercialization until the end of the second full Calendar Year thereafter CureVac may use a contract sales organization to assist it in respect of such co-promotion activities, but not thereafter. CureVac will lead the Commercialization of the Opt-In Product by promoting and detailing in [*****] and detailing with its own sales force or, or upon Genmab’s prior written consent (which Genmab may give or withhold at its sole discretion), using a contract sales organization, *provided, however,* that Genmab shall be solely responsible for establishing and maintaining pricing in all [*****] Genmab will book [*****] sales, with the exception of sales in [*****] where CureVac will book sales. Should CureVac decide not to lead commercialization by promoting and detailing in [*****]. Genmab shall have the right to lead commercialization and book sales in such countries, unless Genmab elects not to exercise such right, in which case the Parties will jointly find a partner to handle the commercialization in such countries. Any sublicensing of the rights under the Opt-In Program, including any rights to the Opt-In Product requires agreement by both Parties, and the Parties shall act in good faith to arrive at a commercially sound and viable exploitation of the Opt-In Product.

7.6 Joint Development and Manufacturing Agreement. No later than [*****] following the date of CureVac's exercise of its Opt-In rights, Genmab and CureVac shall in good faith negotiate and conclude the terms and conditions of the joint development and manufacture covering the Opt-In Product ("**Joint Development and Manufacturing Agreement**"). For clarity, with respect to Manufacturing the provisions of Section 6.2 and Section 6.4 shall apply mutatis mutandis. The Joint Development and Manufacturing Agreement shall be consistent with this Agreement, including this Article 7, and shall cover the following additional provisions:

- (i) provisions for the generation and approval of detailed development plans under the Opt-In R&D Plan, including protocols for Clinical Studies and the corresponding budget;
- (ii) provisions concerning the appointment of CRO's and CMO's and other subcontractors;
- (iii) provisions for handling regulatory matters including dealings with Regulatory Agencies;
- (iv) provisions for the calculation of and sharing of costs for Development and for Manufacture of Product for Development reflecting Section 7.3;
- (v) in circumstances where CureVac is supplying the Opt-In Product or any part of it, detailed supply provisions and an associated quality agreement;

- (vi) liability, indemnification and insurance during the period of Development and associated Manufacture;
- (vii) the provisions of this Agreement that apply in such circumstances unchanged, for example concerning the Joint Steering Committee, assignment of rights with respect to the Opt-In Product, termination of the Opt-in Program, dispute resolution and others.

7.7 Commercialization Plan and Commercialization Agreement. At least [*****] prior to anticipated First Commercial Launch and in no event later than [*****] after the first dosing of the first patient of the first Phase III Clinical Trial with respect to the Opt-In Product, the Joint Steering Committee shall prepare and approve an initial commercialization plan for the Opt-In Product for the balance of the then current calendar year plus the following [*****] The Joint Steering Committee shall, at an appropriate (at the Joint Steering Committee's discretion) time following an Opt-In, but no later than [*****] prior to the anticipated First Commercial Sale of the Opt-In Product anywhere in the Territory as determined by the Joint Steering Committee, establish a joint commercialization team to be responsible for the operations related to Commercialization of the Opt-In Product. In addition the Parties will in good faith negotiate and agree on a commercialization agreement, which shall be consistent with the applicable provisions of this Agreement and shall govern in detail the co-promotion and co-commercialization provisions for the Opt-In Product based on the outline in Section 7.5 ("**Commercialization Agreement**"). In particular, the Commercialization Agreement will provide for:

- (i) the establishment of a joint commercialization committee that will govern the Commercialization activities of the Opt-In Product and will be a subsidiary of the Joint Steering Committee ("**Joint Commercialization Committee**");
- (ii) detailed definitions of Commercialization Costs, profit and net profit that are to be [*****] by the Parties, and the terms for such calculation and sharing, reporting and audit rights;
- (iii) detailed provisions for the operation of the Co-Promote, including the [*****] of first position, second position and third position details;
- (iv) supervision and training by Genmab of the CureVac Co-Promote sales force in USA;
- (v) the provision of promotional materials by Genmab;
- (vi) compliance provisions;
- (vii) Amendment to and updates of the commercialization plan;
- (viii) Regulatory issues, dealings with Regulatory Agencies, recalls and medical inquiries and medical interaction,

- (ix) Public statements and other information concerning the Opt-In Product;
- (x) Liability;
- (xi) Indemnification; and
- (xii) Use of subcontractors.

7.8 Assignment of Rights and Obligations with respect to Opt-In Product

7.8.1 Either Party shall have the right to make an assignment in full of its rights and obligations under this Agreement with regard to an Opt-In Product to the other Party or a Third Party as set out below.

7.8.2 If a Party (“**Assigning Party**”) desires to make an assignment in full of all its rights and obligations, including without limitation its [*****] share and co-funding obligation, with respect to an Opt-In Product (“**Opt-In Product Assignment**”), the Assigning Party shall provide a written offer to the other Party (“**Non-Assigning Party**”), which offer shall include the entire proposed terms in relation to such Opt-In Product Assignment to the Non-Assigning Party, including the exclusive right to Develop, Manufacture and Commercialize the Opt-In Product, under all intellectual property and using all regulatory filings Controlled by the Assigning Party. Upon the Non-Assigning Party’s receipt of such written offer, a [*****] negotiation period (“**Negotiation Period**”) shall be initiated during which the Parties shall engage in good faith negotiations regarding the Assigning Party’s Opt-In Product Assignment offer. The Non-Assigning Party shall have the right to appoint a Third Party as assignee in relation to the Opt-In Product Assignment on the same terms as offered to the Non-Assigning Party. If the Parties have not reached an agreement regarding an Opt-In Product Assignment to the Non-Assigning Party or a Third Party assignee appointed by the Non-Assigning Party upon expiry of the Negotiation Period, the Assigning Party is entitled to offer the Opt-In Product Assignment to an independent Third Party on the same key financial and commercial terms as comprised by the Assigning Party’s latest written offer during the Negotiation Period to the Non-Assigning Party, provided that such Third Party prior to receiving such Opt-In Product Assignment offer has undertaken obligations of confidentiality that are at least as restrictive as the Parties’ confidentiality obligations under this Agreement. Such negotiations with and assignment to an independent Third Party shall be finalized within [*****] after expiry of the Negotiation Period, unless otherwise mutually agreed in writing between the Parties. If such negotiations and assignment has not been finalized within said [*****] period, the Assigning Party shall be deemed to have provided an Opt-In Termination Notice to the Non- Assigning Party and Section 7.9 shall apply.

The Assigning Party shall keep the Non-Assigning Party reasonably informed about the developments in relation to the Assigning Party’s negotiations with any Third Party regarding an Opt-In Product Assignment. If the terms of offer from a Third Party differ from the key financial and commercial terms as comprised by the Assigning Party’s latest written offer during the Negotiation Period to the Non-Assigning Party, then the Non-Assigning party shall have the right to match such offer, before the Assigning Party may accept the offer from the Third Party. Such right to match the offer shall be exercised within [*****] after the Non- Assigning Party’s receipt of notice of the applicable key financial and commercial terms, and otherwise the Non-Assigning Party shall be deemed to have forfeited its right of first refusal.

7.8.3 For the avoidance of doubt, until an Opt-In Product Assignment is duly executed and has become effective, all and any the Assigning Party's rights and obligations under this Agreement shall continue to apply, including without limitation the co-funding obligation, and the Parties shall continue to use Commercial Reasonable Efforts to perform their obligations with respect to the Development and Commercialization of the Opt-In Product.

7.9 Termination of the Opt-In Program. If under Section 7.8.2 an Assigning Party (in this Section 7.9 "**Terminating Party**") has given notice (or is deemed to have given notice) to the other Party that it terminates ("**Opt-In Termination Notice**") the [*****] collaboration of the Opt-In Program and withdraws from the future Development, Manufacture and Commercialization of the Opt-In Target and the Opt-In Product, then within [*****] of receipt of such Opt-In Termination Notice, the non-terminating Party ("**Non-Terminating Party**") shall give written notice to the Terminating Party whether the Non-Terminating Party wishes to assume sole responsibility for the Opt-In Program (which can include finding other collaboration partners or assignees for the Opt-In Program) or whether it wishes the Opt-In Program to terminate completely. Until such notice is given by the Non-Terminating Party, the Parties shall cooperate in the further Development, Manufacture and Commercialization of the Opt-In Product under the terms of this Agreement and the Commercialization Agreement (if the same exists by then) in a commercially reasonable manner. If the Non-Terminating Party gives notice that it intends to assume responsibility for the Opt-In Program and to so continue the further Development and commercialization of the Opt-In Product(s), the JSC shall within [*****] of such notice agree to a transition plan for transition of the conduct of the Opt-In Program to the Non-Terminating Party that shall include (i) transfer of all Development, Manufacturing and Commercialization activity and related regulatory approvals as soon as practicable, and, until then, for the period between termination of the collaboration and such transfer, reimbursement of the Terminating Party for the cost incurred by it in connection with such Development, Manufacturing and Commercialization activity; and (ii) payment of the cost of such transition by the Terminating Party, including FTEs of the Non-Terminating Party involved with the transition; and (iii) the grant of and other terms for an exclusive, fully paid up, royalty free, perpetual, irrevocable sub-licensable license through multiple tiers to all intellectual property Controlled by the Terminating Party and required by the Non-Terminating Party to continue the Opt-In Program and Commercialization of the Opt-In Product. If the Non-Terminating Party gives notice that it does not wish to assume responsibility for the Opt-In Program, the JSC shall within [*****] agree a wind-down plan for the Opt-In Program, the costs of which shall be borne by the Terminating Party.

8. CO-PROMOTION IN LIEU OF AN OPT-IN.

8.1 Co-Promotion in lieu of an Opt-In. In the event Genmab has not started research on a Research Program Antibody Combination or does not exercise an option with respect to any Reserved Program Antibody Combination within the Option Period, and CureVac consequently cannot exercise its Opt-In right under Section 7.1 above, CureVac has the right to elect to Co-Promote [*****] Single Antibody Product which is granted Regulatory Approval (in the form of marketing authorization) in the [*****] ("**Co-Promotion Product**"; "**Co-Promotion Territory**"), subject to the terms and conditions set forth in Sections 8.1 and 8.2 and the Co-Promotion Agreement ("**CureVac Co-Promotion Option**"). No later than [*****] prior to the anticipated First Commercial Sale of any Single Antibody Product, Genmab shall give written notice to CureVac that this is anticipated, specifying the Single Antibody Product in question, and providing a data package on such Single Antibody Product which reasonably allows CureVac to evaluate its option to Co-Promote such Product. Within [*****] of receipt of both such notice and the data package, CureVac shall notify Genmab in writing whether CureVac is exercising the CureVac Co-Promotion Option in relation to such Single Antibody Product. For the avoidance of doubt, following CureVac's exercise of its Co-Promotion Option, Genmab shall no longer be required to provide notice of anticipated First Commercial Sale to CureVac with respect to other Products.

8.2 Conclusion of a Co-Promotion Agreement. No later than [*****] following the date of CureVac's exercise of the CureVac Co-Promotion Option, Genmab and CureVac shall in good faith negotiate and conclude the terms and conditions of a co-promotion agreement covering the Co-Promotion of the Co-Promotion Product in the Co-Promotion Territory ("**Co-Promotion Agreement**"). The Co-Promotion Agreement shall be consistent with this Article 7 and shall cover the following additional provisions:

- (i) establishment of a Co-Promotion committee that will govern the Co-Promotion activities and will be a subsidiary of the Collaboration Committee ("**Co-Promotion Committee**");
- (ii) detailed provisions for the operation of the Co-Promote, including the equitable sharing of first line, second line and third line details based upon the principle that the CureVac sales force shall constitute, at the election of CureVac, up to [*****] of the overall number of sales representatives needed to promote the Co-Promotion Product in the Co-Promotion Territory upon First Commercial Sale of the Product in the Co-Promotion Territory, as determined by Genmab and in accordance with the Co-Promotion Territory Commercialization Plan;
- (iii) at the latest [*****] prior to the estimated date of the First Commercial Sale of the Co-Promotion Product in the Co-Promotion Territory, Genmab will propose to the Co-Promotion Committee for discussion, comment, review, amendment and approval a plan to Commercialize the Co-Promotion Product in the Co-Promotion Territory for the period up to the end of the first full Calendar Year following first Commercial Sale ("**Co-Promotion Territory Commercialization Plan**"). The Co-Promotion Committee shall use best endeavors to agree the form of the first Co-Promotion Territory Commercialization Plan within [*****] of its initial submission. Not later than [*****] of each Calendar Year the Co-Promotion Committee shall prepare and agree an updated Co-Promotion Territory Commercialization Plan for the following Calendar Year;
- (iv) performance criteria for CureVac sales force, and consequences of non-performance;

- (v) Genmab shall [*****] specifically related to CureVac' detailing efforts in relation to the given Product in the Co-Promote Territory. For avoidance of doubt, Genmab shall not be required to reimburse CureVac for any build-up or overhead costs of CureVac establishing a sales force for Products, including rent for office space;
- (vi) such additional customary terms and conditions (including terms regarding training, marketing materials, responsibility for recalls and adverse event reporting, and maintenance of records relating to detail activities) as may be appropriate to provide for such co-promotion activities;
- (vii) Compliance provisions; and
- (viii) Termination provisions.

9. GOVERNANCE.

9.1 Management.

9.1.1 Alliance Management. Management of the collaborative alliance reflected in this Agreement will be under the responsibility of the individual designated in writing within [*****] of the Effective Date for CureVac ("**CureVac Alliance Manager**") and of the individual designated in writing within [*****] of the Effective Date for Genmab ("**Genmab Alliance Manager**", and together, the "**Alliance Managers**"). Each Alliance Manager will be the primary point of contact for the other Party on all matters relating to the operation of this Agreement other than Program activities.

9.1.2 Program Management. Management of the activities under the Programs will be under the responsibility of the individual designated in writing within [*****] of the Effective Date for CureVac ("**CureVac Project Leader**") and of the individual designated in writing within [*****] of the Effective Date for Genmab ("**Genmab Project Leader**", and together with the CureVac Project Leader, the "**Project Leaders**"). Each Project Leader will be the primary point of contact for the other Party on all matters relating to the Program activities. After IND filing for a particular Product, the Project Leaders shall no longer be required, unless CureVac has exercised its Opt-In with respect to such Product (a Cocktail Product).

9.2 Joint Research Committee.

9.2.1 Establishment. Within [*****] after the Effective Date the Parties will establish a joint research committee ("**Joint Research Committee**" or "**JRC**"). The JRC will govern the collaboration represented by this Agreement up to IND filing for all Products. The JRC shall be comprised of [*****] representatives of CureVac and [*****] representatives of Genmab. Each Party may replace its JRC representatives at any time upon written notice to the other Party, *provided, however*, that each Party shall use Commercially Reasonable Efforts to ensure continuity on the JRC. The Alliance Manager of each Party should always attend meetings of the JRC. In addition, each Party may invite a reasonable number of participants, in addition to its representatives, to attend JRC meetings; provided that if either Party intends to have any Third Party (including any consultant) attend such a meeting, such Party shall provide prior written notice to the other Party. Such Party shall ensure that such Third Party is bound by confidentiality and non-use obligations consistent with the terms of this Agreement.

- 9.2.2 JRC Meetings.** The JRC shall meet on a quarterly basis by teleconference, videoconference or in person, provided that at least every [*****] the meeting shall be in person (which in- person meeting will be held at alternate facilities of each Party), unless agreed otherwise by the JRC representatives. The JRC will have a quorum if at least [*****] representatives of each Party is present or participating. Each Party will be responsible for all of its own expenses of participating in the JRC meetings. The Parties will endeavor to schedule meetings of the JRC at least [*****] in advance. Each Party may call special meetings of the JRC with at least [*****] prior written notice, except in exigent circumstances, to resolve particular matters requested by such Party and within the decision-making responsibility of the JRC. Genmab shall prepare the meeting agenda with input from CureVac, and Genmab shall chair the meeting.
- 9.2.3 JRC Minutes.** The Alliance Manager of Genmab shall record the minutes of each JRC meeting in writing. Such minutes shall be circulated by Genmab's Alliance Manager to CureVac's Alliance Manager no later than [*****] following the meeting for review, comment and approval of CureVac. If no comments are received within [*****] of the receipt of the minutes by CureVac, unless otherwise agreed, they shall be deemed to be approved by CureVac. Furthermore, if the Parties are unable to reach agreement on the minutes within [*****] of the applicable meeting, the sections of the minutes that have been mutually agreed between the Parties by that date shall be deemed approved and, in addition, each Party shall record in the same document its own version of those sections of the minutes on which the Parties were not able to agree.
- 9.3 JRC Functions and Powers.** The JRC will be responsible generally for facilitating the Parties' interactions under this Agreement and specifically for overseeing the Development activities up to IND filing. The JRC has no jurisdiction (i) to make any amendments to this Agreement, which right is reserved to the Parties; and (ii) no jurisdiction over any dispute relating to the validity, performance, construction or interpretation of this Agreement. The principal functions of the JRC will include:
- (i) overseeing the First Collaboration Program on the First Collaboration Target or any Replacement Target and all Research Programs;
 - (ii) reviewing and approving the First Program Research Plan in relation to a Replacement Target, the Reserved Target Research Plans, and the Other Pre-IND Program Research Plans and considering and approving any amendments thereto;
 - (iii) For the First Collaboration Program (with respect to the First Collaboration Target, not the Replacement Target, if applicable), approving the budget for all Development activities up until IND. For the First Collaboration Program with respect to the Replacement Target, if applicable, and any other Programs approving the budget with respect to Development activities to be performed by CureVac up until IND;

- (iv) reviewing and deciding upon suitable LNP Technology and exclusivity status;
- (v) exchanging preclinical Development Data and other technical information;
- (vi) discussing Product-related Manufacturing;
- (vii) creating Sub-Committees;
- (viii) serving as a forum where Genmab as part of its regular updates to the JRC shall inform CureVac of any material feedback received from Regulatory Agencies in relation to any Product prior to IND filing;
- (ix) discussing material regulatory filings and regulatory interactions related to the Products if required by Genmab or if such material regulatory filings contain information on CureVac Technology;
- (x) fostering the collaborative relationship between the Parties;
- (xi) resolving disputes between the Parties;
- (xii) such other functions as agreed by the Parties.

9.4 JRC Sub-Committees. From time to time, the JRC may establish sub-committees (each, a “**Sub-Committee**”) to oversee particular projects or activities, such as Sub-Committees on IP, CMC, Manufacturing tech transfer and/or supply chain matters. Each Sub-Committee shall undertake the activities delegated to it by the JRC. Subject to Section 9.6, during the process of establishing each Sub-Committee, such Sub-Committee and the JRC shall agree which matters such Sub-Committee will resolve on its own, and on which matters such Sub-Committee will advise the JRC for resolution by such matters by the JRC. Generally there shall be a range of matters specified by the JRC on which the Sub-Committee will make recommendations to the JRC for consideration by the JRC. Unless otherwise agreed between the Parties, the governance rules with respect to the JRC shall apply to the Sub-Committees *mutatis mutandis, provided, however,* that upon mutual agreement between the Parties a Sub-Committee may continue to operate even after the JRC is dissolved, as long as such Sub-Committee’s tasks are still ongoing. Subject to Section 9.6 deadlocks arising in any Sub-Committee will be referred to the JRC for resolution or, if the Sub-Committee continues after the JRC is dissolved, to the Collaboration Committee or Joint Steering Committee (solely for an Opt-In Product).

9.5 JRC Decisions.

9.5.1 Dispute Resolution. In conducting its activities, the JRC and each Sub-Committee shall operate and make decisions consistent with the terms of this Agreement. The JRC will seek to act by consensus. If the JRC cannot reach consensus or a dispute arises that cannot be resolved within the JRC, then such matter (except the matters (i) and (ii) below) shall be escalated to the Alliance Managers of each Party. The Alliance Managers should involve the relevant JRC members of each Party in such dispute resolution. If such matter is not resolved within [*****] after escalation to the Alliance Managers, Genmab may make final decisions for all matters within the purview of the JRC except:

- (i) disputes of a technical nature concerning use of the LNP Technology; and
- (ii) disputes regarding proposed amendments to the budget for Development activities up until IND with respect to the First Collaboration Program (with respect to the First Collaboration Target, not the Replacement Target, if applicable) where such amendment would result in an increase of the total budget of more than [*****] percent compared to the latest approved budget.
- (iii) disputes about Manufacture of Product by CureVac not subject to dispute resolution under the Early Clinical Supply Agreement or MSA, or disputes referred to the JRC from the Manufacturing Tech Transfer Sub-Committee.

If the JRC, after escalation to the Alliance Managers, cannot reach consensus in relation to matters set out above in (i), (ii) and (iii) above, then such matter shall be escalated to the CDO of each Party. If such matter is not resolved within [*****] after escalation to the CDOs, the dispute resolution mechanisms set out in Section 17.5.2 shall apply.

9.5.2 Restriction on Genmab Decision Making. Genmab shall not resolve such a matter in a manner that (a) would require CureVac to perform less or additional activities or incur additional expenses not contemplated by this Agreement or the R&D Plans (as each R&D Plan was initially agreed by the Parties or as it was last amended with CureVac's consent), (b) excuses, reduces, or delays Genmab's obligations under this Agreement, including with respect to payments to CureVac, (c) negates any consent right or other rights specifically granted or allocated to CureVac under this Agreement, or (d) amends, modifies, or waives compliances with the terms of this Agreement.

9.6 IP Sub-Committee. Within [*****] of the Effective Date the JRC shall establish an IP Sub-committee comprising one patent attorney of each Party ("**IP Representatives**"). The IP Sub-committee shall be the forum for discussion and liaison between the Parties concerning filings to be made for Program Patent Rights, Other Inventions Patent Rights and Joint Patent Rights during the Research Period. For avoidance of doubt, the IP Sub-committee is not a decision-making forum, but serves as a forum for discussion where the Parties may coordinate and consult with each other with respect to any such filings.

9.7 Information and Results. Except as otherwise provided in this Agreement, the Parties will make available and disclose to one another preclinical Development Data and other results of work conducted pursuant to each Program prior to and in preparation for the JRC meetings, by the deadline and in the level of detail, form and format to be designated by the JRC; *provided, however*, that, in any event, each Party shall to the extent reasonably possible provide the other Party with quarterly updates regarding its work pursuant to the Programs preferably [*****] prior to each JRC meeting.

- 9.8 Collaboration Committee (All Programs except an Opt-In Program).** The Parties agree to establish Collaboration Committee(s) for all Programs except an Opt-In Program.
- 9.8.1 Formation; Duration.** Within [*****] after IND filing for a Program, the Parties shall establish a Collaboration Committee (the “**Collaboration Committee**”) that will oversee the Development of the Products within such Program as set forth in this Section 9.8.
- 9.8.2 Composition.** Each Collaboration Committee will be comprised of [*****] named representatives of each Party. Each Collaboration Committee will be led by [*****] chair appointed by Genmab. Within [*****] after IND filing for a Product, each Party shall notify the other Party of its initial representatives on the respective Collaboration Committee. Each Party may replace one or more of its representatives effective upon written notice to the other Party.
- 9.8.3 Function and Powers of the Collaboration Committee.** The Collaboration Committee will:
- a. receive written reports or presentations from Genmab of its progress with each Product Development Plan summarizing Genmab’s Development activities and the results thereof with respect to the applicable Product and discuss at meetings the status, progress, and results of the Development of the respective Product in the Territory;
 - b. if CureVac exercises its Co-Promote Right with respect to a Product, direct and oversee the Co-Promotion Committee on all significant issues and resolve disputed matters that may arise at the Co-Promotion Committee, except as otherwise set out in the Co-Promotion Agreement. For clarity, the Collaboration Committee shall not have any right to amend the Co-Promotion Agreement;
 - c. in circumstances in which CureVac is supplying the Product or any part of the Product, discuss matters relating to Manufacturing; and
 - d. perform any and all tasks and responsibilities that are expressly attributed to the Collaboration Committee under this Agreement or as otherwise agreed by the Parties in writing.
- 9.8.4 Meetings.** The Collaboration Committee will meet [*****] after its formation and during the remainder of the Term. The Collaboration Committee may conduct such meetings by telephone, videoconference, or in person as determined by the chair. Each Party’s Alliance Manager will ensure that its Collaboration Committee members receive adequate notice of such meetings. Genmab may call special meetings of the Collaboration Committee with at least [*****] prior written notice, except in exigent circumstances, to resolve particular matters requested by Genmab and within the decision-making responsibility of the Collaboration Committee. Meetings of the Collaboration Committee fulfill the requirements of this Section 9.8.4 only if at least [*****] representatives of each Party participate in such meeting. Each Party may invite a reasonable number of participants, in addition to its representatives, to attend Collaboration Committee meetings. Each Party is responsible for its own expenses incurred in connection with participating in and attending all such meetings. The Alliance Manager of Genmab shall record the minutes of each Collaboration Committee meeting in writing. Such minutes shall be circulated by Genmab’s Alliance Manager to CureVac’s Alliance Manager no later than [*****] following the meeting for review and comments of CureVac. If no comments are received within [*****] of the receipt of the minutes by CureVac, unless otherwise agreed, they shall be deemed to be approved by CureVac. Furthermore, if the Parties are unable to reach agreement on the minutes within [*****] of the applicable meeting, the sections of the minutes that have been mutually agreed between the Parties by that date shall be deemed approved and, in addition, each Party shall record in the same document its own version of those sections of the minutes on which the Parties were not able to agree.

9.8.5 Collaboration Committee Decisions. In conducting its activities, the Collaboration Committee and each Sub-Committee (as applicable) shall operate and make decisions consistent with the terms of this Agreement. The Collaboration Committee will seek to act by consensus. If the Collaboration Committee cannot reach consensus or a dispute arises that cannot be resolved within the Collaboration Committee, then such matter shall be escalated to the Alliance Managers of each Party. The Alliance Managers should involve the relevant Collaboration Committee members of each Party in such dispute resolution. If such matter is not resolved within [*****] after escalation to the Alliance Managers, Genmab may make final decisions for all matters within the purview of the Collaboration Committee except disputes about the Manufacture by CureVac of Product which shall be governed by the relevant supply agreement, if applicable.

9.9 Joint Steering Committee (Opt-In Program). The Parties agree to establish and operate a Joint Steering Committee for the Opt-In Program as required by Section 7.2 and as set forth below in this Section 9.9.

9.9.1 Composition. The Joint Steering Committee will be comprised of [*****] named representatives of each Party. The chair of the Joint Steering Committee will alternate each calendar year, with Genmab to chair the first year. Within [*****] after an Opt-In by CureVac, each Party shall notify the other Party of its initial representatives on the Joint Steering Committee. Each Party may replace one or more of its representatives effective upon written notice to the other Party.

9.9.2 Function and Powers of the Joint Steering Committee. The Joint Steering Committee shall:

- (i) direct, coordinate and supervise the Development of the Opt-In Product, including discuss and agree to any update to the applicable R&D Plan;
- (ii) discuss and agree on matters relating to Manufacturing of Opt-In Product;

- (iii) once it has been formed, direct and oversee the Joint Commercialization Committee on all significant issues, and resolve disputed matters that may arise at the Joint Steering Committee;
- (iv) establish subcommittees as determined to be reasonably necessary or useful by the Joint Steering Committee, and oversee any operating subcommittee on all significant issues, and resolve disputed matters that may arise at the subcommittees; and
- (v) perform any and all tasks and responsibilities that are expressly attributed to the Joint Steering Committee under this Agreement or as otherwise agreed by the Parties in writing.

9.9.3 Meetings. The will meet [*****] after its formation and for as long as the Parties jointly Develop, Manufacture and/or Commercialize the Opt-In Product. The Joint Steering Committee may conduct such meetings by telephone, videoconference, or in person as determined by the chair, *provided, however*, that the Joint Steering shall to the extent reasonably possible meet in person at least [*****] every calendar year. Each Party's Alliance Manager will ensure that its Joint Steering Committee members receive adequate notice of such meetings. A Party may call special meetings of the Joint Steering Committee with at least [*****] prior written notice, except in exigent circumstances, to resolve particular matters requested by a Party and within the decision-making responsibility of the Joint Steering Committee. Meetings of the Joint Steering Committee fulfill the requirements of this Section 9.9.3 only if at least [*****] representatives of each Party participate in such meeting. Each Party may invite a reasonable number of participants, in addition to its representatives, to attend Joint Steering Committee meetings; provided that if either Party intends to have any Third Party (including any consultant) attend such a meeting, such Party shall provide prior written notice to the other Party. Such Party shall ensure that such Third Party is bound by confidentiality and non-use obligations consistent with the terms of this Agreement. Each Party is responsible for its own expenses incurred in connection with participating in and attending all such meetings. The Alliance Manager of the Party chairing the meeting shall record the minutes of the Joint Steering Committee meeting in writing. Such minutes shall be circulated to the other Party's Alliance Manager no later than [*****] following the meeting for review, comment and approval of the other Party. If no comments are received within [*****] of the receipt of the minutes by the other Party, unless otherwise agreed, they shall be deemed to be approved by the other Party. Furthermore, if the Parties are unable to reach agreement on the minutes within [*****] of the applicable meeting, the sections of the minutes that have been mutually agreed between the Parties by that date shall be deemed approved and, in addition, each Party shall record in the same document its own version of those sections of the minutes on which the Parties were not able to agree.

9.9.4 Decisions. A quorum of at least [*****] Joint Steering Committee member appointed by each Party shall be present at or shall otherwise participate in each Joint Steering Committee meeting. Each Party has one vote in the decisions of the Joint Steering Committee. Decisions of the Joint Steering Committee shall be unanimous. If the members of the Joint Steering Committee cannot agree on a particular issue, the issue shall be escalated pursuant to Section 17.5, unless otherwise explicitly provided for in the Joint Development and Manufacturing Agreement and/or Commercialization Agreement.

- 9.9.5 Subcommittees.** The Joint Steering Committee may establish and disband such subcommittees as deemed necessary by the Joint Steering Committee. In addition, the Joint Steering Committee shall establish the Joint Commercialization Committee as provided for in Section 7.7(i). Each such subcommittee will consist of the same number of representatives designated by each Party, which number shall be mutually agreed by the Parties. Each Party may change its representatives on written notice to the other Party or send a substitute representative to any subcommittee meeting. Each Party's representatives and any substitute for a representative shall be bound by the obligations of confidentiality set forth in Section 13. Except as expressly provided in this Agreement, no subcommittee has the authority to bind the Parties hereunder and each subcommittee will report to the Joint Steering Committee. Each Party is responsible for its own expenses incurred in connection with participating in and attending all such meetings. If a dispute arises that cannot be resolved by a subcommittee, either Party may refer such dispute to the Joint Steering Committee for resolution.
- 9.9.6 Authority.** The Joint Steering Committee and any subcommittees have only the powers assigned expressly to it in this Section 9 and elsewhere in this Agreement, and does not have any power to amend, modify, or waive compliance with this Agreement. Each Party retains the rights, powers, and discretion granted to it under this Agreement and neither Party may delegate or vest such rights, powers, or discretion in the Joint Steering Committee or subcommittee unless expressly provided for in this Agreement or the Parties expressly so agree in writing.
- 10. CONSIDERATION.**
- 10.1 Upfront Payment.** In partial consideration for the exclusive licenses granted hereunder, Genmab shall pay to CureVac a non-refundable and non-creditable fee in the amount of Ten Million US Dollars (US\$10,000,000) within [*****] after Genmab's receipt of an invoice of the respective amount from CureVac.
- 10.2 Option Exercise Fee.** In partial consideration for the exclusive options granted hereunder for up to three (3) Reserved Targets, Genmab shall pay to CureVac on an Option Exercise-by-Option Exercise basis a non-refundable and non-creditable (except as otherwise explicitly provided for in the Agreement) Option Exercise Fee in the amount of [*****] i.e., a maximum of Thirty Million US Dollars (US\$30,000,000) for all potential options hereunder ("**Option Exercise Fee**"). Such payment shall be made within [*****] after Genmab's receipt of an invoice of the respective amount from CureVac; *provided, however*, that a Reservation Fee paid by Genmab to CureVac for the corresponding Reserved Target shall be deducted from the Option Exercise Fee, [*****].
- 10.3 Product Selection Fee.** Genmab shall pay CureVac a one time non-refundable and non-creditable fee of five million USD (\$5,000,000) upon Product Selection by a Product Selection Notice covering a Product based upon the First Program Antibody or a Replacement Target Antibody, as applicable. Such payment shall be made within [*****] after Genmab's receipt of an invoice of the respective amount from CureVac.
- 10.4 Opt-In fee.** If CureVac exercises its option to Opt-In under Section 7.1 above, CureVac shall pay Genmab a non-refundable and non-creditable Opt-In fee of Three Million Dollars (US\$ 3,000,000) within [*****] after CureVac's receipt of an invoice of the respective amount from Genmab; and no Option Exercise Fee shall be payable by Genmab for the respective Optioned Target. If the Option Exercise Fee has already been paid, CureVac shall reimburse such payment to Genmab within [*****] of receipt of invoice.

10.5 Development and Regulatory Milestone Payments. In addition to the payments under Sections 10.1, to 10.4 inclusive, in further consideration for the exclusive licenses granted hereunder, and subject to the terms and conditions set forth in this Agreement, Genmab shall make the following non-refundable and non-creditable Development and regulatory milestone payments to CureVac:

10.5.1 Single Antibody Products. On a Single Antibody Product-by-Single Antibody Product basis, the following payments shall be made for all Single Antibody Products (including the First Collaboration Program – including if it is amended to cover a Replacement Target, and any Other Pre-IND Program, as applicable):

Development Milestone Event	In US\$ Million
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

Regulatory Milestone Event	1st BLA/MAA	2nd BLA/MAA
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]

Sales Milestone event	In US\$ Million
Genmab shall make the following one-off, sales-based milestone payments, for the Calendar Year in which aggregated annual worldwide Net Sales exceed for the first time the following amounts:	
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

10.5.2 Cocktail Products. On a Cocktail Product-by-Cocktail Product basis, the following payments shall be made for all Cocktail Products (with the exception of any Opt-In Product):

Development Milestone Event	In US\$ Million
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

Regulatory Milestone Event	1st BLA/MAA	2nd BLA/MAA
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]

Sales Milestone event	In US\$ Million
Genmab shall make the following one-off, sales-based milestone payments, for the Calendar Year in which aggregated annual worldwide Net Sales exceed for the first time the following amounts:	
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

If any one of the milestone events under Section 10.5 is not required for the Development of a Product, such milestone payment shall become payable upon achieving the respective milestone event following the milestone event which was not required, [*****]. For purposes of clarity, the maximum aggregate amount payable by Genmab pursuant to this Section 10.5 is [*****] for each Single Antibody Product, and [*****] for each Cocktail Product.

10.5.3 Obligation to Inform. Genmab shall inform CureVac on the occurrence of a milestone event under Sections 10.5.1 and 10.5.2 [*****] after the occurrence thereof.

10.5.4 Milestone Payment Terms. Each milestone payment shall be due and payable within [*****] after the receipt of the respective invoice by Genmab. Notwithstanding the foregoing, each sales milestone payment shall be paid together with the royalty payments for the Calendar Quarter during which the respective milestone has been achieved.

10.6 Royalties.

10.6.1 Royalty Rates. As further consideration for the rights and licenses granted by CureVac to Genmab under this Agreement, Genmab shall pay royalties to CureVac in the following amounts, in all cases considered on a Product-by-Product basis:

Single Antibody Products:

Aggregate annual Net Sales of each Single Antibody Product (Product-by-Product)	Royalty Rate
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

Cocktail Products (with the exception of any Opt-In Product):

Aggregate annual Net Sales of each Cocktail Product (except any Opt-In Product) (Product-by-Product)	Royalty Rate
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

10.6.2 Royalty Calculation. The royalties shall be calculated on the basis of aggregate annual Net Sales in the Territory Product-by-Product, with the royalty tiers set out above being calculated on a Product-by-Product basis from First Commercial Sale until the expiration of the applicable Royalty Term. Examples of royalty calculations are included in the enclosed **Exhibit 10.6.2**.

10.6.3 Royalty Term. Genmab’s obligation to pay royalties shall begin, on a country-by-country basis, with the First Commercial Sale, and expire, on a country-by-country and a Product-by-Product basis, upon the later of (i) expiry or abandonment of the last to expire Valid Claim in such country that Covers such Product; (ii) expiry of Regulatory Exclusivity for the respective Product in such country; or (iii) ten (10) years from the date of First Commercial Sale of the respective Product (“**Royalty Term**”).

- 10.6.4 FTO License.** If, during the Term, Genmab reasonably concludes, on the advice of patent counsel, that it might be required to seek a license under certain Third Party Patent Rights in order to have freedom to operate in practicing or making use of the CureVac Background Technology and/or LNP Technology by the Development, Manufacture, Commercialization or other exploitation of Products in accordance with this Agreement in any country (“**FTO License**”), Genmab shall be free to take such FTO License, and the circumstances of Sections 10.6.5 and 10.6.6 may be applicable, subject to their provisions. Before taking such FTO License, Genmab will consult with CureVac in good faith regarding the need for such FTO License and other available options, such as seeking to invalidate certain claims of the relevant Third Party Patent Rights.
- 10.6.5 Third Party Payments–Granted Patent Rights in the Disclosure Letter.** Subject to Section 10.6.9, with respect to Third Party Patent Rights referenced in the Disclosure Letter that are granted as of the Effective Date, and subject to compliance with the procedures of Section 10.6.4, in the event Genmab seeks and obtains an FTO License under such Third Party Patent Rights and is required to make any payments (milestone, royalties or other payments, including settlement payments) to one or more Third Party licensors to obtain such license, then milestone payments and/or royalties due to CureVac for the respective Product shall be reduced by [*****] of the amount of such Third Party licensor payments payable by Genmab until Genmab has been reimbursed [*****] of all such payments. For clarity, subject to Section 10.6.9 Genmab shall also have the right to reduce milestone payments and royalties to CureVac by [*****] of any payments made by Genmab to CureVac under Section 2.8 with respect to any Third Party IP of the type the subject of this 10.6.5. The Parties acknowledge and agree that this mechanism for deduction of Third Party payments does not imply in any way that the Third Party Patent Rights referenced in the Disclosure Letter may constitute any risk with respect to freedom to operate.
- 10.6.6 Other Third Party Payments.** Subject to Section 10.6.9, with respect to Third Party Patent Rights not referenced in the Disclosure Letter or Third Party Patent Rights referenced in the Disclosure letter that are not granted as of the Effective Date, and subject to compliance with the procedures of Section 10.6.4 in the event Genmab seeks and obtains an FTO License under such Third Party Patent Rights and is required to make any payments (milestone, royalties or other payments, including settlement payments) to one or more Third Party licensors to obtain such license, then royalties due to CureVac for the respective Product shall be reduced by [*****] of the amount of such Third Party licensor payments payable by Genmab until Genmab has been reimbursed in full for [*****] of all such payments. For clarity, subject to Section 10.6.9, Genmab shall also have the right to reduce royalties to CureVac by [*****] of any payments made by Genmab to CureVac under Section 2.8 with respect to any Third Party IP of the type the subject of this Section 10.6.6. The Parties acknowledge and agree that this mechanism for deduction of Third Party payments does not imply in any way that the Third Party Patent Rights referenced in the Disclosure Letter may constitute any risk with respect to freedom to operate.
- 10.6.7 Countries Without Patent Protection.** During the Royalty Term with respect to the First Collaboration Target and the related Product and subject to Section 10.6.9, in countries where sales of the Product do not or no longer fall under any Valid Claim, but where Regulatory Exclusivity is still in effect, royalties set forth above in Section 10.6.1 shall be reduced by [*****] for Net Sales in such country in the first [*****] period during which no Valid Claim exists, but Regulatory Exclusivity is in effect, [*****] for Net Sales in such country in the second [*****] period during which no Valid Claim exists, but Regulatory Exclusivity is in effect, and [*****] for Net Sales in such country for the remainder of the Royalty Term. For avoidance of doubt, in countries where sales of Products do not or no longer fall under any Valid Claim and Regulatory Exclusivity is not available or has expired, royalties set forth above in Section 10.6.1 shall be reduced by [*****] for Net Sales in such country. During the Royalty Term with respect to any Optioned Target or Optioned Target Combination, as applicable, and the related Products and subject to Section 10.6.9, in countries where sales of Products do not or no longer fall under any Valid Claim, royalties set forth above in Section 10.6.1 shall be reduced by [*****] for Net Sales in such country.

- 10.6.8 Generic Competition.** In countries where Generic Products are being marketed by a Third Party, royalties set forth above shall be further reduced by the greater of: (a) [*****] for Net Sales in such country as long as such Generic Product is on the market in such country; or (b) [*****] for Net Sales in such country in circumstances where the total unit sales of such Generic Products in such country in a Calendar Year equal or exceed [*****] of the total sales in such country of the respective Product and Generic Products combined.
- 10.6.9 Cumulative Deductions.** Notwithstanding the above, any royalty reduction made pursuant to Section 10.6.5, Section 10.6.6, Section 10.6.7 and/or Section 10.6.8 or reimbursements made under Section 2.8 that are creditable against royalties shall in no event reduce the applicable royalty rate for such Products sold in the respective country to less than [*****] for Single Antibody and [*****] for Cocktail Products. For avoidance of doubt, in the event that the minimum royalty rates are reached in connection with royalty deductions made pursuant to Section 2.8, Section 10.6.5 and/or Section 10.6.6, Genmab shall be allowed to reduce its future royalty payments, always subject to the above royalty floor, until Genmab has been settled in full with respect to its right to deduct payments made to any Third Party licensor or reimbursements to Curevac, as applicable.
- 10.6.10 Blended Royalties.** With respect to a potential step down in royalty rates to account for the expiry of certain Patent Rights, the Parties acknowledge and agree that the CureVac Technology licensed under this Agreement may justify royalty rates and/or royalty terms of differing amounts for sales of Products in the Territory, which rates could be applied separately to Products involving the exercise of CureVac Patent Rights in the Territory and/or the incorporation of CureVac Know-How, and that if such royalties were calculated separately, royalties relating to the CureVac Patent Rights in the Territory and royalties relating to the CureVac Know-How would last for different terms. For practicality reasons the Parties have agreed on a blended royalty rate. For clarity, this Section 10.6.10 solely explains the rationale behind the royalty rates agreed on by the Parties and does not modify any of the other provisions of this Agreement.
- 10.6.11 Royalty Payments.** Within [*****] after the end of each Calendar Quarter in which any Net Sales occur, Genmab shall calculate the royalty payments owed to CureVac and shall remit to CureVac the amount owed to CureVac. All royalty payments shall be computed by converting the Net Sales in each country in the Territory into the currency of US Dollars, using the monthly exchange rates as customarily used by Genmab in preparing its audited financial statements for the applicable Calendar Quarter.

10.7 Reports. Each royalty payment shall be accompanied by a written report describing the Net Sales of each Product sold by or on behalf of Genmab, its Affiliates and Sublicensees during the applicable Calendar Quarter for each country in which sales of any Product occurred, specifying: [*****].

10.8 Records. Genmab, its Affiliates and/or its Sublicensees shall keep and maintain records of sales of the Product(s) so that the royalties payable and the royalty reports may be verified. Such records shall upon reasonable written notice be open to inspection during business hours for a [*****] period after the Calendar Quarter to which such records relate, but in any event not more than once per calendar year, by a nationally recognized independent certified public accountant selected by CureVac reasonably acceptable to Genmab and retained at CureVac's expense. Said accountant shall sign a confidentiality agreement prepared by Genmab and reasonably acceptable to CureVac and shall then have the right to audit the records kept pursuant to this Agreement to confirm Net Sales, royalties and other payments for a period covering not more than [*****] following the Calendar Quarter to which they pertain. If said examination of records reveals any underpayment(s) of the royalty payable, then Genmab shall promptly pay the balance due to CureVac, and if the underpayment(s) is/are more than [*****] then Genmab shall also bear the expenses of said accountant. If said examination of records reveals any overpayment(s) of royalty payable, then CureVac shall credit the amount overpaid against Genmab's future royalty payment(s) (and if no further payments are due, shall be refunded by CureVac at the request of Genmab).

10.9 Participation Payment. In the event Genmab grants a sublicense to a Third Party (i.e., a Sublicensee) for a Product expressing the First Program Antibody before [*****], Genmab shall pay to CureVac a one time payment of Ten Million US Dollars (US\$ 10,000,000), in addition to the milestone and royalty payments to be made under this Article 10.

10.10 Payment Terms.

10.10.1 All payments by Genmab to CureVac shall be made by wire transfer payment in US dollars, except with respect to payments of FTE costs which shall be made in Euros, and shall be remitted to the following bank account:

[*****]

Invoices shall be issued to Genmab A/S, or to the assignee Affiliate as specified in Section 17.1 on a Program-by-Program basis. Invoices shall be sent to Genmab by email at the following address and stating the following VAT number or as otherwise designated by Genmab in writing:

Genmab B.V.

[*****]

10.10.2 Payments not paid within [*****] after the due date under this Agreement shall bear interest at an annual rate of [*****] above the three-month-LIBOR rate of the respective currency for the time period in which such amount is outstanding, as disclosed from time to time by the European Central Bank which applied on the due date. Calculation of interest will be made for the exact number of days in the interest period based on a year of 360 days (actual/360) by Genmab.

10.11 Taxes.

10.11.1 Each Party shall be responsible for its own income taxes assessed by a tax or other authority except as otherwise set forth in this Agreement.

10.11.2 The Parties acknowledge and agree that it is their mutual objective and intent to optimize, to the extent feasible and in compliance with Applicable Laws, taxes payable with respect to their collaborative efforts under this Agreement and that they shall use reasonable efforts to cooperate and coordinate with each other to achieve such objective.

10.11.3 CureVac shall bear and pay any and all taxes levied on account of any payments made to it under this Agreement. If any taxes are required to be withheld by Genmab from any payment to be made to CureVac under this Agreement, Genmab shall (a) deduct such taxes from the payment to be made to CureVac, (b) timely pay the taxes to the proper taxing authority, and (c) send proof of payment to CureVac with an explanation of payment of such taxes within [*****] following such payment. If Genmab had a duty to withhold taxes in connection with any payment it made to CureVac but Genmab failed to withhold, and such taxes were assessed against and paid by Genmab, then CureVac shall, at Genmab's request and upon receipt of proof of Genmab's payment of such taxes, reimburse to Genmab the amount equivalent to such taxes (including interest but excluding penalties) paid by Genmab. For purposes of this Section 10.11.3, each Party shall provide the other with reasonably requested assistance to enable the due deduction by Genmab or CureVac, as applicable, and appropriate recovery by CureVac or Genmab, as applicable, which assistance includes provision of any tax forms and other information that may be reasonably necessary for Genmab or CureVac not to withhold tax.

10.11.4 All payments due to the terms of this Agreement are expressed to be exclusive of value added tax (VAT) or similar indirect taxes. VAT/indirect taxes shall be added to the payments due to the terms if legally applicable.

11. INTELLECTUAL PROPERTY.

11.1 Background Technology. As between the Parties, all right, title and interest in and to all [*****] shall be Controlled by [*****] and all right, title and interest in and to all [*****] shall be Controlled by [*****]. As between the Parties, each Party shall have the sole right, in its sole discretion and at its sole expense, to prosecute, maintain and defend Patent Rights within its Background Technology; *provided, however*, that CureVac shall consider in good faith the interests of Genmab in the prosecution, maintenance and defense of [*****].

11.2 Disclosure of Inventions. During the Research Period, on a Collaboration Target-by- Collaboration Target basis, each Party shall as soon as reasonably practical disclose to the other Party, through the forum of the IP Sub Committee, the making, conception, or reduction to practice of any Inventions. After the Research Period, each Party shall as soon as reasonably practical disclose to the other Party, through the forum of the IP Sub Committee if it is continued after the Research Period, or otherwise through the Alliance Manager, the making, conception, or reduction to practice of any Invention that may be owned in part or in whole by the other Party pursuant to this Section 11.

11.3 Ownership of Inventions. The Parties agree that all right, title and interest in any and all Inventions (including all Patent Rights resulting from such Inventions and all Know-How embodied in such Inventions) shall be owned as follows, [*****].

11.3.1 Genmab Inventions. Genmab shall own all right, title and interest in and to

(A) [*****] and

(B) [*****]

Any such Invention as described under (A) or (B) above shall be considered an Invention of Genmab (“**Genmab Invention**”). The types of inventions listed in Section 2 of **Exhibit 11.3** are all Inventions that are not to be considered a [*****] as applicable.

- 11.3.2 CureVac Inventions.** CureVac shall own all right, title and interest in and to all Inventions that [*****] Controlled by [*****] and can be [*****]. The types of Inventions listed in [*****]. Any such Invention as described above in this Section 11.3.2 shall be considered an Invention of CureVac (“**CureVac Invention**”).
- 11.3.3 Other Inventions; Joint Inventions.** For all other Inventions (i.e., Inventions that do not fall within the categories described in Section 11.3.1 or 11.3.2 above) that are invented by or on behalf of Genmab and/or CureVac (including the non-limiting example set out in Section 3 of **Exhibit 11.3**) (“**Other Inventions**”), [*****]. Any such Other Invention shall be referred to as “**Genmab Other Invention**” if owned by Genmab, and as “**CureVac Other Invention**” if owned by CureVac. Except to the extent either Party is restricted by the licenses granted to the other Party under this Agreement or the other terms of this Agreement, each Party shall have the right to [*****] the Other Invention under any Other Invention Patent Right and related Know-How, i.e., shall have a [*****] license to such Other Invention, and any consent from the other Party as may be required under Applicable Law for a Party to practice and exploit such Other Invention and Other Invention Patent Right and related Know-How shall hereby be given by the other Party. If the Parties [*****] shall be jointly owned by the Parties (“**Joint Invention**”). Except to the extent either Party is restricted by the licenses granted to the other Party under this Agreement or the other terms of this Agreement, each Party may freely practice and exploit its interest in the Joint Inventions, Joint Patent Rights and related Know-How, and any consent from the other Party as may be required under Applicable Law for a Party to practice and exploit such Joint Inventions and Joint Patent Rights shall hereby be given by the other Party. For the avoidance of doubt, the licenses granted under this Section 11.3.3 do not include any license to use any Background Technology of the other Party.
- 11.4 Assignment and transfer of Inventions.** To give effect to the ownership principles described in Section 11.3 each Party shall assign and transfer, and hereby assigns and transfers, to such other Party (or with respect to assignments and transfers to Genmab, to Genmab A/S or Genmab B.V. as designated by Genmab in writing on a Program-by-Program basis) [*****] as the case may be, of its present and future rights, interest and title to any such Invention that is to vest in the other Party pursuant to the ownership principles described in Section 11.3, and the other Party shall accept and hereby accepts such assignment and transfer (“**Assigned Invention**”). At the written instruction of the other Party, the transferring Party agrees to make or procure all such assignments from its employees, consultants and subcontractors as are necessary to give effect to the provisions of this Section 11.4 and to assist the transfer in every way reasonably required by the transferee (i) to obtain Patent Rights to such Assigned Invention in any and all countries for which Patent Rights are being sought; and (ii) to maintain and defend Patent Rights in all Assigned Inventions which have been or may be assigned as provided above. The transferring Party shall execute and deliver, and cause its employees, consultants and subcontractors to execute and deliver, all such documents, instruments and other papers and take all such other action which the transferee may reasonably request in order to give effect to the provisions of this Section 11.4.

- 11.5 Cooperation.** Each Party represents and agrees that all its employee(s), contractor(s) and agent(s) will be obligated under a binding written agreement or otherwise to assign to such Party all Inventions discovered, created, conceived, developed or reduced to practice by such employee(s), contractor(s) or agent(s) in connection with this Agreement. Notwithstanding anything to the contrary herein, to the extent the German Laws on Employee Inventions (*Arbeitnehmererfindungsgesetz*) applies, each Party shall claim the unlimited use of any Invention discovered, created, conceived, developed or reduced to practice in accordance with such laws. Regardless of which Party is the ultimate assignee of an Invention under this Agreement, each Party shall be solely responsible for payments to be made to its employees or other persons engaged by such Party in consideration for the Invention under the German Laws on Employee Inventions, or any corresponding laws in other countries. For clarity, each Party shall be and remain solely responsible towards its own employees for compliance with the requirements of the German Laws on Employee Inventions (*Arbeitnehmererfindungsgesetz*) if applicable.
- 11.6 Non-exclusive License to Generally Applicable Patent Rights.** Except to the extent CureVac is restricted by the licenses granted to Genmab under this Agreement or the other terms of this Agreement, Genmab hereby grants to CureVac, and CureVac hereby accepts, a fully paid-up, royalty-free, perpetual, irrevocable, worldwide, non-exclusive, transferable and sub-licensable (through multiple tiers) license to freely practice and use the Generally Applicable Patent Rights for activities in connection with the CureVac Background Technology, CureVac Technology, Know-How generated by CureVac outside this Agreement and/or the LNP Technology, in each case to the extent that such activities are outside the scope of this Agreement. For the avoidance of doubt, subject to the provisions of Section 13.4.4 CureVac shall not have any right to use, exploit or disclose any Confidential Information of Genmab in connection with such activities.
- 11.7 Filing, Prosecution, Maintenance and Defense.**
- 11.7.1 CureVac Program Patent Rights.** Subject to Section 11.7.3 below, CureVac shall have the first right, but not the obligation, to file, prosecute, maintain and defend the CureVac Program Patent Rights throughout the Territory at its sole expense. Upon Genmab's request, CureVac shall keep Genmab advised of the status of prosecution of all such Patent Rights included within the CureVac Program Patent Rights, and shall give Genmab before filing or response to office actions, as applicable, reasonable opportunity to review and comment upon the text of any applications or amendments for CureVac Program Patent Rights. CureVac shall not unreasonably refuse to address any of Genmab's comments made in accordance with this Section 11.7.1. Notwithstanding the above, prior to filing any application for a CureVac Invention that may disclose, in part or in full, a Genmab Invention, Other Invention or Joint Invention, CureVac shall provide Genmab with a copy of the draft application and provide Genmab with at least [*****] to review and comment upon the text of such draft application. If Genmab notifies CureVac within the above [*****] deadline that Genmab desires to file an application for a Genmab Invention, Joint Invention or Genmab Other Invention, the Parties shall coordinate the filing of the application for a CureVac Invention with the filing of Genmab's application for such Genmab Invention, Other Invention or Joint Invention so that CureVac's application and Genmab's application are filed on the same day or otherwise filed in a way that secures and protects each of the Parties' interest. CureVac shall promptly give notice to Genmab of the grant, lapse, revocation, surrender or invalidation of any CureVac Program Patent Rights for which CureVac is responsible for the filing, prosecution and maintenance. CureVac shall give notice to Genmab of any desire to not file patent applications claiming CureVac Program Patent Rights on a country by country basis and, in such cases, shall permit Genmab, in its sole discretion, to file such patent applications at its own expense and in its own name. If Genmab elects to file, such Patent Right shall be deemed a Genmab Patent Right and CureVac shall execute such documents and perform such acts at CureVac's reasonable expense as may be reasonably necessary for Genmab to perform such filing. For avoidance of doubt, CureVac will not include a Genmab Invention, Other Invention or Joint Invention in a separate patent claim of a patent application to be filed by CureVac without Genmab's prior written consent.

11.7.2 Genmab Program Patent Rights. Genmab shall have the sole right, but not the obligation, at its sole expense, to file, prosecute, maintain and defend the Genmab Program Patent Rights throughout the Territory in good faith consistent with its customary patent policy and its reasonable business judgment and shall consider in good faith the reasonable interests of CureVac in so doing. Upon CureVac's request, Genmab shall keep CureVac advised of the status of prosecution of all Royalty Product Patent Rights. Notwithstanding the above, prior to filing any application for a Genmab Invention that may disclose, in part or in full, a CureVac Invention, Other Invention or Joint Invention, Genmab shall provide CureVac with a copy of the draft application and provide CureVac with at [*****] to review and comment upon the text of such draft application. If CureVac notifies Genmab within the above [*****] deadline that CureVac desires to file an application for a CureVac Invention or CureVac Other Invention, the Parties shall coordinate the filing of the application for a Genmab Invention with the filing of CureVac's application for such CureVac Invention or CureVac Other Invention so that CureVac's application and Genmab's application are filed on the same day or otherwise filed in a way that secures and protects each of the Parties' interest, such as by agreeing to follow the principles for filing, prosecution, maintenance and defense outlined in Section 11.7.3. For avoidance of doubt, Genmab will not include a CureVac Invention, Other Invention or Joint Invention in a separate patent claim of a patent application to be filed by Genmab without CureVac's prior written consent.

11.7.3 Filing, Prosecution, Maintenance and Defense of certain Patents claiming both Genmab Inventions and CureVac Inventions. Notwithstanding the above in Section 11.7.1, if Genmab reasonably finds that the planned filing of a patent application by CureVac claiming a CureVac Invention may be damaging to Genmab's possibilities of obtaining adequate Patent Rights for a particular Product, Genmab shall have the right to request in writing, through the IP Sub- Committee or the Alliance Manager, as applicable, and providing detailed reasons that CureVac does not file such application at that time, always giving due consideration to CureVac's interest in obtaining an adequate patent protection of the CureVac Inventions and Genmab's interest in obtaining an adequate patent protection for Genmab Inventions and that particular Product. For avoidance of doubt, [*****]. As a result of such written request from Genmab, CureVac will not file such application at such time. Instead, CureVac can file such application on the earlier of (i) [*****] after Genmab has promptly informed CureVac in writing that Genmab has obtained sufficient data to support an application for Patent Rights for a Genmab Invention relating to the Product making use of such CureVac Invention, or (ii) [*****] following Product Selection under Section 5.3 or Option Exercise under Section 3.4 (whichever occurs sooner) according to the R&D Plan relating to the Product which is the subject of the Genmab patent application; or (iii) when Genmab decides not to pursue Product Selection under Section 5.3 or Option Exercise under Section 3.4 for that particular Product. [*****]. If CureVac believes it would be beneficial that such Genmab application should contain claims for such CureVac Invention, it may request Genmab to include the relevant CureVac Invention in the Genmab filing, and Genmab shall consider such request in good faith. Subject to the restrictions of the licenses granted by CureVac to Genmab under this Agreement and any other restrictions explicitly set out in this Agreement, Genmab shall and hereby does grant to CureVac, and CureVac shall and hereby does accept, an exclusive, worldwide, fully paid, perpetual, fully transferable license, with the right to grant sublicenses in multiple tiers, under any such Genmab Program Patent Rights covering a CureVac Invention to practice and exploit such CureVac Invention and only such CureVac Invention. In addition, upon CureVac's request, Genmab shall collaborate in good faith with CureVac with a view to filing, where possible, specific divisional application(s) claiming such CureVac Invention(s), that would be prosecuted, maintained and defended under the control of CureVac and at its expense, and, to the extent possible without damaging Genmab's patent position with respect to a given Product, which divisional application(s) shall be assigned to CureVac for its further prosecution, maintenance and defense at CureVac's cost. Such assigned divisional Patent Rights shall then be deemed CureVac Program Patent Rights. Upon such filing of a divisional application, Genmab shall abandon the patent claim(s) for such CureVac Invention.

11.7.4 CureVac Other Invention Patent Rights. CureVac shall have the first right, but not the obligation, to file, prosecute, maintain and defend Patent Rights for CureVac Other Inventions (“**CureVac Other Invention Patent Rights**”) throughout the Territory, at its sole expense, and CureVac shall as soon as reasonably practicable give notice to Genmab of any desire to not file patent applications claiming CureVac Other Invention Patent Rights or to cease prosecution and/or maintenance and/or defense of CureVac Other Invention Patent Rights on a country by country basis and, in such cases, shall permit Genmab, in its sole discretion, to file such patent applications or to continue prosecution or maintenance or defense of such CureVac Other Invention Patent Rights (in which case thereafter they will be deemed a Genmab Other Invention Patent Right) at its own expense and in its own name. At the latest [*****] before filing, and except where CureVac has given up the right to prosecute as provided above, CureVac shall give Genmab an opportunity to review and comment upon the text of any application with respect to any CureVac Other Invention Patent Right, shall consult with Genmab with respect thereto, shall not unreasonably refuse to address any of Genmab’s comments and supply Genmab with a copy of the application as filed, together with notice of its filing date and serial number. CureVac shall keep Genmab reasonably informed of the status of the actual and prospective prosecution, maintenance and defense, including but not limited to any substantive communications with the competent patent offices that may affect the scope of such filings, and CureVac shall to the extent reasonably possible give Genmab a timely, prior opportunity to review and comment upon any such substantive communication and shall consult with Genmab with respect thereto, and shall not unreasonably refuse to address any of Genmab’s comments. Notwithstanding anything to the contrary above, prior to filing any application for a CureVac Other Invention that may disclose, in part or in full, a Genmab Invention, CureVac shall provide Genmab with a copy of the draft application and provide Genmab with at least [*****] to review and comment upon the text of such draft application. If Genmab notifies CureVac within the above [*****] deadline that Genmab desires to file an application for a Genmab Invention, the Parties shall coordinate the filing of the application for a CureVac Other Invention with the filing of Genmab’s application for such Genmab Invention so that the CureVac application and Genmab application are filed on the same day or otherwise filed in a way that secures and protects each of the Parties’ interest.

11.7.5 Genmab Other Invention Patent Rights. Genmab shall have the first right, but not the obligation, to file, prosecute, maintain and defend Patent Rights for Genmab Other Inventions (“**Genmab Other Invention Patent Rights**”) throughout the Territory, at its sole expense, and Genmab shall as soon as reasonably practicable give notice to CureVac of any desire to not file patent applications claiming Genmab Other Invention Patent Rights or to cease prosecution and/or maintenance and/or defense of Genmab Other Invention Patent Rights on a country by country basis and, in such cases, shall permit CureVac, in its sole discretion, to file such patent applications or to continue prosecution or maintenance or defense of such Genmab Other Invention Patent Rights (in which case thereafter they will be deemed a CureVac Other Invention Patent Right) at its own expense and in its own name. At the latest [*****] before filing, and except where Genmab has given up the right to prosecute as provided above, Genmab shall [*****]. Notwithstanding anything to the contrary above, prior to filing any application for a Genmab Other Invention that may disclose, in part or in full, a CureVac Invention, Genmab shall provide CureVac with a copy of the draft application and provide CureVac with at least [*****] to review and comment upon the text of such draft application. If CureVac notifies Genmab within the above [*****] deadline that CureVac desires to file an application for a CureVac Invention, the Parties shall coordinate the filing of the application for a Genmab Other Invention with the filing of CureVac’s application for such CureVac Invention so that the CureVac application and Genmab application are filed on the same day or otherwise filed in a way that secures and protects each of the Parties’ interest.

11.8 Joint Patent Rights.

11.8.1 Genmab shall have the first right, but not the obligation, to file, prosecute, maintain and defend Patent Rights relating to Joint Inventions (“**Joint Patent Rights**”) throughout the Territory, at its sole expense, and Genmab shall give timely notice to CureVac, and, if during the Research Period, with a copy to the IP Sub-Committee, of any desire to not file patent applications claiming Joint Patent Rights or to cease prosecution and/or maintenance of Joint Patent Rights on a country-by-country basis and, in such cases, shall permit CureVac, in its sole discretion, to file such patent applications or to continue prosecution, maintenance or defense of such Joint Patent Rights at its own expense. At the latest [****] before filing, the prosecuting Party shall give the non-prosecuting Party an opportunity to review and comment upon the text of any application with respect to such Joint Patent Right, shall consult with the non-prosecuting Party with respect thereto, shall not unreasonably refuse to address any of the non-prosecuting Party’s comments and supply the non-prosecuting Party with a copy of the application as filed, together with notice of its filing date and serial number. The prosecuting Party shall keep the non-prosecuting Party reasonably informed of the status of the actual and prospective prosecution, and maintenance, including but not limited to any substantive communications with the competent patent offices that may affect the scope of such filings, and the prosecuting Party shall give the non-prosecuting Party a timely, prior opportunity to review and comment upon any such substantive communication and shall consult with such non- prosecuting Party with respect thereto, and shall not unreasonably refuse to address any of such non-prosecuting Party’s comments.

11.9 Patent Term Extension. [****]. It is acknowledged that Genmab has the ultimate decision-making authority with regard to the filing for Patent Term Extensions, but Genmab agrees that when making that decision it shall not unreasonably take any action or inaction that causes CureVac significant financial detriment, [****]. CureVac shall cooperate with Genmab with regard to obtaining Patent Term Extensions and shall provide to Genmab prompt and reasonable assistance as requested by Genmab, at Genmab’s expense, including by taking such action as may be required of the patent holder under any Applicable Laws to obtain such Patent Term Extension. [****].

12. ENFORCEMENT AND DEFENSE.

12.1 Notice. Each Party shall notify the other Party in writing as soon as reasonably possible upon learning of any actual or suspected infringement by a Third Party of any CureVac Patent Rights, Genmab Patent Rights, CureVac Other Invention Patent Right, Genmab Other Invention Patent Right, Joint Patent Right or Patent Rights comprised in the LNP Technology Controlled by CureVac that may adversely affect any Program Antibody, Program Antibody Combination or Product in the Field in the Territory (“**Relevant Infringement**”), or of any claim by a Third Party alleging the invalidity, unenforceability, or non-infringement of any CureVac Patent Rights, Genmab Patent Rights, CureVac Other Invention Patent Right, Genmab Other Invention Patent Right or Joint Patent Right.

12.2 Enforcement.

- 12.2.1 CureVac Patent Rights, Patent Rights in LNP Technology, CureVac Other Invention Patent Rights.** Except as set forth in Section 12.2.2 below, as between the Parties, CureVac will have the first right, but not the obligation, to seek to abate any Relevant Infringement of any CureVac Patent Right, Patent Rights comprised in the LNP Technology Controlled by CureVac (to the extent CureVac is authorized to do so by the LNP Technology licensor) or CureVac Other Invention Patent Right by a Third Party, or to file suit against any such Third Party for such Relevant Infringement, and CureVac shall bear all the expense of such suit or abatement of such Relevant Infringement. Genmab may, at its own expense, be represented in any such action by counsel of its own choice. If CureVac does not bring such legal action within the earlier of (i) [****] after the notice provided pursuant to Section 12.1, or (ii) within [****] prior to any deadline under Applicable Law for bringing such legal action; or if CureVac decides to discontinue any ongoing legal action, Genmab may bring and control any legal action in connection with such Relevant Infringement of CureVac Patent Rights, Patent Rights comprised in the LNP Technology (to the extent possible under CureVac's license to such LNP Technology) or CureVac Other Invention Patent Rights at its own expense as it reasonably determines appropriate.
- 12.2.2 Genmab Patent Rights.** As between the Parties, Genmab will have the sole right, but not the obligation, to seek to abate any infringement of Genmab Patent Rights by a Third Party, or to file suit against any such Third Party for such infringement. Genmab shall bear all the expense of such suit or abatement of infringement. With respect to any infringement by a Third Party of a Genmab Patent Right where such infringement relates to a claim for a CureVac Invention included in such Genmab Patent Right pursuant to Section 11.7.3, Genmab agrees to collaborate with CureVac in good faith at CureVac's cost to enforce such claim against such Third Party infringement [****]; provided that in the reasonable opinion of Genmab such enforcement will not entail any significant risk with respect to upholding an adequate patent protection for Genmab Inventions and the Product.
- 12.2.3 Genmab Other Invention Patent Right and Joint Patent Rights.** Genmab shall have the first right, but not the obligation, to seek to abate any infringement of Genmab Other Invention Patent Rights or Joint Patent Rights by a Third Party, or to file suit against any such Third Party for such infringement, and Genmab shall bear all the expense of such suit or abatement of infringement. CureVac may, at its own expense, be represented in any such action by counsel of its own choice. If Genmab does not bring such legal action within the earlier of (i) [****] after the notice provided pursuant to Section 12.1, or (ii) within [****] prior to any deadline under Applicable Law for bringing such legal action; or if Genmab decides to discontinue any ongoing legal action, CureVac may bring and control any legal action in connection with such infringement of Genmab Other Invention Patent Rights and Joint Patent Rights at its own expense as it reasonably determines appropriate.
- 12.2.4 Assistance.** The non-enforcing Party shall provide such assistance as the enforcing Party shall reasonably request in connection with any action or suit hereunder to prevent or enjoin any such infringement or unauthorized use of a CureVac Patent Right or Genmab Patent Right, including agreeing to be joined as a party to such action or suit and executing legal documents as reasonably requested by the enforcing Party. Such assistance will be provided by a Party, at the enforcing Party's cost.

12.3 Defense.

12.3.1 Defense of CureVac Patent Rights, Patent Rights in LNP Technology and CureVac Other Invention Patent Rights. Except as set forth in subsection 12.3.2 below, as between the Parties, CureVac will have the first right, but not the obligation, to defend against a declaratory judgment action or other action challenging any CureVac Patent Right or Patent Right comprised in LNP Technology Controlled by CureVac or CureVac Other Invention Patent Rights.

12.3.2 Defense of Genmab Other Invention Patent Rights and/or Joint Patent Rights. As between the Parties, Genmab will have the first right, but not the obligation, to defend against a declaratory judgment action or other action challenging any Genmab Other Invention Patent Right or Joint Patent Rights. Genmab shall bear all the expense of such defense.

12.3.3 Taking over the defense. If the Party first responsible for such defense does not take steps to defend (or have defended) within a commercially reasonable time period, or elects not to continue any such defense (in which case it will promptly provide notice thereof to the other Party), then (A) in the case of an election by CureVac not to defend (or have defended) a CureVac Patent Right, Patent Right in LNP Technology Controlled by CureVac or CureVac Other Invention Patent Right, Genmab shall have the right, but not the obligation, to defend such CureVac Patent Right, Patent Right in LNP Technology (to the extent possible under CureVac's license to such LNP Technology) or CureVac Other Invention Patent Right with respect to a Program Antibody, Program Antibody Combination or Product; *provided, however*, that Genmab shall bear all the expenses of such suit, and (B) in the case of an election by Genmab not to defend a Genmab Other Invention Patent Right or Joint Patent Right, CureVac shall have the right, but not the obligation, to take action or bring suit to defend such Patent Right; *provided, however* that CureVac shall bear all the expenses of such suit.

12.3.4 Control. Notwithstanding the foregoing, any response to a Third Party infringer's counterclaim of invalidity or unenforceability of any CureVac Patent Rights, Patent Right in LNP Technology Controlled by CureVac (to the extent authorized under CureVac's license to such LNP Technology), CureVac Other Invention Patent Rights, Genmab Other Invention Patent Rights or Joint Patent Right shall be controlled by the Party who controls the relevant enforcement proceeding pursuant to this Article 12 unless otherwise mutually agreed by the Parties in writing.

12.3.5 Defense of Genmab Patent Rights. As between the Parties, Genmab shall have the sole right, but not the obligation, to defend against a declaratory judgment action or other action challenging any Genmab Patent Right. Genmab shall bear all the expenses of such defense. With respect to any defense of a Genmab Patent Right where such defense relates to a claim for a CureVac Invention included in such Genmab Patent Right pursuant to Section 11.7.3, Genmab agrees to collaborate with CureVac in good faith at CureVac's cost to defend such claim against such declaratory judgment action or other action challenging such claim [*****]; *provided* that in the reasonable opinion of Genmab such defense will not entail any significant risk with respect to upholding an adequate patent protection for Genmab Inventions and the Product.

- 12.4 Participation.** With respect to any infringement or defensive action identified above in this Article 12, the enforcing or defending Party shall keep the other Party updated and reasonably consult with the other Party with respect to any such action, it being understood that in such consultation the enforcing or defending Party shall take the other Party's comments reasonably into account, *provided, however*, that the enforcing or defending Party will have the right to make the final determination in the event of any disagreement between the Parties related to any decision in connection with such action.
- 12.5 Damages.** Unless otherwise agreed by the Parties, all monies recovered upon the final judgment or settlement of any infringement action relating to the Development, Manufacture or Commercialization of Product(s) under this Agreement which may be controlled by either Genmab or CureVac and described in this Article 12, in each case will be used as follows:
- (i) first to reimburse the controlling Party, and thereafter the non-controlling Party, for each of their reasonable out-of-pocket costs and expenses relating to the action;
 - (ii) second, the remaining recovery shall then be used to compensate each Party for the respective damages suffered from the infringement of the respective Patent Right based on a lost profits calculation, provided that in the event the remaining portion of the recovery is not sufficient to compensate each Party's damages, such compensation shall be paid on a pro-rata share based on the respective damages/lost profits suffered, *provided, however*, if such respective damages/lost profits suffered cannot be reasonably ascertained, then (a) with respect to an action controlled by Genmab, Genmab shall receive [*****] of the recovery and CureVac shall receive [*****] except in the event that the recovery relates to an Opt-In Product in which case the recovery shall be [*****] and (b) with respect to an action controlled by CureVac, the recovery shall be [*****];
 - (iii) third, the remaining portion of any such recovery to be allocated between the Parties in the same ratio used for the calculation under Section 12.5(ii).
- 12.6 Consent and Consultation.** Neither Party shall settle any claim or demand in any such litigation admitting the invalidity or non-infringement of the other Party's Patent Rights (for clarity, including Joint Patent Rights), or otherwise materially negatively impacting the other Party's rights or interests under this Agreement without the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed. In addition to the foregoing, to the extent any action initiated by Genmab involves any infringement of CureVac Patent Rights, Genmab will consult with CureVac regarding issues relating to such CureVac Patent Rights, and take CureVac's input into good faith consideration.

12.7 Defense and Settlement of Third Party Claims.

- 12.7.1** If the Development, Manufacture or Commercialization of any Program Antibody, Program Antibody Combination or Product in any country in accordance with this Agreement or other activity of either of the Parties pursuant to the Agreement is alleged by a Third Party to infringe a Third Party's Patent Right, the Party becoming aware of such allegation shall promptly notify the other Party. CureVac has the first right, but not the obligation, to control any defense of any such claim involving alleged infringement of Third Party rights by CureVac's activities under any Program at its own expense and by counsel of its own choice, and Genmab may, at its own expense, choose to be represented in any such action by counsel of its own choice. Genmab has the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by Genmab's activities under the Program at its own expense and by counsel of its own choice, and CureVac may, at its own expense, choose to be represented in any such action by counsel of its own choice. Neither Party may settle any patent infringement litigation under this Section 12.7.1 in a manner that admits the invalidity or unenforceability of the other Party's Patent Rights or Joint Patent Rights or imposes on the other Party restrictions or obligations or other liabilities, without the written consent of such other Party, which consent shall not be unreasonably withheld. Notwithstanding the above, with respect to any Opt-In Product, the Parties shall mutually agree on a common strategy for the defense of any such claim involving alleged infringement of Third Party rights.
- 12.7.2** If a Third Party sues Genmab or CureVac or any of their Affiliates, distributors or permitted Sublicensees alleging that Genmab's practice of a right granted by CureVac to Genmab hereunder through the Development, Manufacture and/or Commercialization of any Program Antibody, Program Antibody Combination or Product pursuant to this Agreement infringes or will infringe said Third Party's Patent Rights, then, upon the defending Party's request and in connection with the defense of any such Third Party infringement suit, the non-defending Party shall provide reasonable assistance to the defending Party for such defense and/or shall join in any such action if reasonably required by the defending Party in order to defend such claim or to assert all available defenses and claims, and to cooperate reasonably with the defending Party. The defending Party shall not enter into a settlement that imposes a financial obligation upon the non-defending Party or which limits the scope or invalidates any Patent Right of either Party without such Party's prior written consent, which consent shall not be unreasonably withheld or delayed, and in any settlement the defending Party shall always take into consideration the interest of the non-defending Party.
- 12.8 Common Interest Disclosures.** With regard to any information (including materials) disclosed pursuant to this Agreement by one Party to the other Party regarding intellectual property rights owned or controlled by Third Parties, the Parties agree that they have a common legal interest in determining whether, and to what extent, Third Party intellectual property rights may affect the Development, Manufacturing and/or Commercialization of any Product, and have a further common legal interest in defending against any actual or prospective Third Party claims based on allegations of misuse or infringement of intellectual property rights relating to the Development, Manufacturing and/or Commercialization of any Product. Accordingly, the Parties agree that all such information obtained by one Party from the other Party will be used solely for purposes of the Parties' common legal interests with respect to the conduct of this Agreement. All information will be treated as protected by the attorney-client privilege, the work product privilege, and any other privilege or immunity that may otherwise be applicable. By sharing any information, neither Party intends to waive or limit any privilege or immunity that may apply to the shared information. Neither Party shall have the authority to waive any privilege or immunity on behalf of the other Party without such other Party's prior written consent, nor shall the waiver of privilege or immunity resulting from the conduct of one Party be deemed to apply against any other Party.

13. CONFIDENTIALITY.

13.1 Obligation of Confidentiality. As of and after the Effective Date, all Confidential Information disclosed, revealed or otherwise made available to one Party or its Affiliates (“**Receiving Party**”) by or on behalf of the other Party (“**Disclosing Party**”) under, or as a result of, this Agreement is made available to the Receiving Party solely to permit the Receiving Party to exercise its rights, and perform its obligations, under this Agreement. The Receiving Party shall not use any of the Disclosing Party’s Confidential Information for any other purpose, and shall not disclose, reveal or otherwise make any of the Disclosing Party’s Confidential Information available to any other person, firm, corporation or other entity, without the prior written authorization of the Disclosing Party, except as explicitly stated in this Article 13.

13.2 Additional Obligations.

13.2.1 Appropriate Safeguards. In furtherance of the Receiving Party’s obligations under Section 13.1 hereof, the Receiving Party shall take all reasonable steps, and shall implement all appropriate and reasonable safeguards, to seek to prevent the unauthorized use or disclosure of any of the Disclosing Party’s Confidential Information.

13.2.2 Unauthorized Use or Disclosure. The Receiving Party shall furnish the Disclosing Party with written notice immediately of it becoming aware and indicating details of any unauthorized use or disclosure of any of the Disclosing Party’s Confidential Information by any employee, officer, director, consultant, CRO, CMO, contractors, agent(s), consultant(s), and Sublicensees (in the case of Genmab), or Financial Partner of/the Receiving Party, and shall take all actions reasonably required in order to prevent any further unauthorized use or disclosure of the Disclosing Party’s Confidential Information. Notwithstanding the foregoing, the Receiving Party remains responsible and liable for any unauthorized use by any employee, officer, director, consultant, CRO, CMO, contractors, agent(s), consultant(s), and Sublicensees (in the case of Genmab), or Financial Partner of the Receiving Party.

13.3 Limitations. The Receiving Party’s obligations under Sections 13.1 shall not apply to the extent that the Receiving Party can demonstrate by competent written evidence that any of the Disclosing Party’s Confidential Information:

- (i) is known by the Receiving Party at the time of its receipt, and not through a prior disclosure by or on behalf of the Disclosing Party;
- (ii) is in the public domain by use and/or publication before its receipt from the Disclosing Party, or thereafter enters the public domain through no fault of the Receiving Party;

- (iii) is subsequently disclosed to the Receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality regarding the Confidential Information; or
- (iv) is developed by the Receiving Party independently of Confidential Information or material received from the Disclosing Party.

13.4 Authorized Disclosures.

13.4.1 Necessary Disclosures. Each Party may disclose the other Party's Confidential Information as expressly permitted by this Agreement or if and to the extent such disclosure is reasonably necessary in the following instances:

- (i) disclosure to judicial, governmental or other regulatory agencies or authorities in connection with the filing, prosecution, maintenance and defense of Patent Rights as permitted by this Agreement;
- (ii) disclosure to judicial, governmental or other regulatory agencies or authorities to gain or maintain approval, authorizations or the like to Develop, Manufacture or Commercialize a given Product that such Party has a license or right to Develop, Manufacture or Commercialize hereunder in a given country or jurisdiction;
- (iii) prosecuting or defending litigation as permitted by this Agreement;
- (iv) disclosure to its and its Affiliates' employees, officers, directors, consultants, CROs, CMOs, contractors, agent(s), consultant(s), and to Sublicensees (in the case of Genmab), in each case on a need-to-know basis for the purposes as expressly authorized and contemplated by this Agreement, including for the Development, Manufacturing and/or Commercialization of the Program Antibodies or Products (or for such entities to determine their interest in performing such activities) in accordance with this Agreement, on the condition that such Affiliates or Third Parties agree to be bound by confidentiality and non-use obligations that substantially are no less stringent than those confidentiality and non-use provisions contained in this Agreement;
- (v) disclosure to such Party's attorneys, independent accountants or financial advisors for the sole purpose of enabling such attorneys, independent accountants or financial advisors to provide advice to the Receiving Party, on the condition that such attorneys, independent accountants and financial advisors agree to be bound by the confidentiality and non-use obligations contained in this Agreement; or
- (vi) disclosure to any bona fide potential or actual investor, insurer, acquirer, merger partner, Sub-Licensee (in the case of Genmab) or other bona fide potential or actual financial partner or funding source ("**Financial Partner**") solely for the purpose of evaluating or carrying out an actual or potential investment, acquisition, license or collaboration, and to any related persons directly connected with such activity being contemplated with the Financial Partner, such as an advisory firm or investment bank; provided that in connection with such disclosure, the Disclosing Party shall inform each disclosee of the confidential nature of such Confidential Information and disclosure shall be subject to the agreement of each disclosee to be bound by confidentiality and non-use obligations that substantially are no less stringent than those confidentiality and non-use provisions contained in this Agreement.

- 13.4.2 Required Disclosures.** If a Party is required by judicial, governmental or administrative process, including to comply with Applicable Laws (including stock exchange rules) or pursuant to Section 13.4.1(iii), to disclose Confidential Information that is subject to the non-disclosure provisions of Section 13.1, such Party shall to the extent reasonably possible provide the other Party with reasonable advance notice of the disclosure that is being sought in order to provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by judicial, governmental or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Article 13, and the Party disclosing Confidential Information pursuant to judicial, governmental or administrative process shall take all steps reasonably necessary, including without limitation to seek an order of confidentiality, to ensure the continued confidential treatment of such Confidential Information.
- 13.4.3 Disclosure to the LNP Technology provider.** [*****] solely to the extent required under the agreement between the LNP Technology provider and CureVac, and in any case provided that such LNP Technology provider agrees to be bound by confidentiality and non-use obligations that substantially are no less stringent than those confidentiality and non-use provisions contained in this Agreement.
- 13.4.4 Disclosure to a sublicensee of CureVac of the rights granted in Section 11.6.** [*****]. For avoidance of doubt, CureVac may not disclose any other Confidential Information of Genmab to such sublicensee, including Genmab Know-How relating to such Generally Applicable Patent Rights which is not disclosed in said Patent Rights.
- 13.5 Survival.** All of the Receiving Party's obligations under this Article 13 hereof, with respect to the protection of the Disclosing Party's Confidential Information, shall for a period of [*****] survive the expiration or termination of this Agreement for any reason whatsoever.

- 13.6 Public Announcements, Press Releases.** The Parties shall issue a press release in the form attached hereto as **Exhibit 13.6** at an agreed time promptly after the Effective Date. Thereafter, except as otherwise expressly permitted in this Agreement, and except as may be required by Applicable Law, including the listing standards or agreements of any national or international securities exchange, neither Party shall issue any press release or public statement disclosing information relating to this Agreement or the transactions contemplated hereby or the terms hereof without the prior written consent of the other Party, not to be unreasonably withheld, conditioned, or delayed; provided, that notwithstanding the foregoing, to the extent reasonably possible on prior notice to CureVac, and in reasonable time for CureVac to consider if the content requires an announcement by CureVac, Genmab may make disclosures relating to the development or commercialization of a Product, including publication of the results of research or development activities, any clinical trial conducted on a Product whether or not conducted by Genmab, Regulatory Filings, Regulatory Approvals or any health or safety matter related to a Product. For all other public disclosures, subject to Section 13.7, if either Party desires to issue a press release or other public statement disclosing information relating to this Agreement or the transactions contemplated hereby or the terms hereof, the issuing Party will provide the other Party with a copy of the proposed press release or public statement. The issuing Party shall specify with each such proposed press release or public statement, taking into account the urgency of the matter being disclosed, a reasonable period of time within which the Receiving Party may provide any comments on such proposed press release or public statement (but in no event less than [*****], unless reasonably necessary to comply with Applicable Law). If the reviewing Party provides any comments, the Parties will consult on such proposed press release or public statement and work in good faith to prepare a mutually acceptable proposed press release or public statement. For avoidance of doubt, neither Party may make such other public disclosure without the other Party's prior written consent, unless reasonably necessary to comply with any Applicable Law. Each Party may repeat any information relating to this Agreement that has already been publicly disclosed in accordance with this Section 13.6, provided such information continues as of such time to be accurate.
- 13.7 Publication.** With respect to any paper or presentation proposed for disclosure by Genmab that includes Confidential Information of CureVac (excluding any information that falls under the exceptions of Section 13.6), CureVac may review and comment and approve any such proposed paper or presentation, such approval not to be unreasonably withheld, conditioned, or delayed. Genmab shall submit to CureVac the proposed publication or presentation (including posters, slides, abstracts, manuscripts, marketing materials and written descriptions of oral presentations) at least [*****] prior to the date of submission for publication or the date of presentation, whichever is earlier, of any of such submitted materials. CureVac shall review such submitted materials and respond to Genmab as soon as reasonably possible, but in any case, within [*****] ([*****]) after receipt thereof. [*****]. For avoidance of doubt, CureVac shall not make any publication without Genmab's prior written consent.

14. INDEMNIFICATION AND REPRESENTATIONS AND WARRANTIES.

14.1 Indemnification by Genmab. Genmab will defend, indemnify and hold CureVac and its Affiliates and their directors, officers, employees, consultants, agents and contractors (the “**CureVac Indemnified Parties**”) harmless from and against [*****] resulting or arising from (A) [*****] (B) [*****] or (iii) [*****]; except, in each case, to the extent caused by the negligence or willful misconduct of any of the CureVac Indemnified Parties. CureVac will give Genmab prompt notice of any such claim or lawsuit. Such notice shall include a reasonable identification of the alleged facts giving rise to such claim for indemnification. The failure to deliver written notice to CureVac within a reasonable time after the commencement of any action with respect to a claim shall only relieve CureVac of its indemnification obligations if and to the extent CureVac is actually and materially prejudiced thereby. Without limiting the foregoing indemnity, Genmab will have the right to compromise, settle or defend any such claim or lawsuit (to the extent subject to indemnity by Genmab as set forth herein); provided that (i) no offer of settlement, settlement or compromise by Genmab shall be binding on CureVac without its prior written consent, not to be unreasonably withheld, conditioned or delayed, unless such settlement fully releases CureVac without any liability, loss, cost or obligation incurred by CureVac and in no event shall any settlement or compromise admit or concede that any aspect of any of the CureVac Patent Rights, CureVac Other Invention Patent Rights or the Joint Patent Rights is invalid or unenforceable or adversely affect the scope of any of the CureVac Patent Rights, CureVac Other Invention Patent Rights or the Joint Patent Rights; and (ii) Genmab shall not have authority to admit any wrongdoing or misconduct on the part of CureVac Indemnified Parties, any licensor of LNP Technology or contractors except with CureVac’s prior written consent.

14.2 Indemnification by CureVac. CureVac will defend, indemnify and hold Genmab and its Affiliates and their directors, officers, employees, consultants, agents, Sublicensees and contractors (the “**Genmab Indemnified Parties**”) harmless from and against any and all losses, liabilities, claims, suits, proceedings, expenses, fees, recoveries and damages, including reasonable legal expenses and costs including attorneys’ fees, resulting or arising out of any claim by any Third Party resulting or arising from (i) [*****] or (ii) [*****] or (iii) [*****] except, in each case, to the extent caused by the negligence or willful misconduct of any of the Genmab Indemnified Parties. Genmab will give CureVac prompt notice of any such claim or lawsuit. Such notice shall include a reasonable identification of the alleged facts giving rise to such claim for indemnification. The failure to deliver written notice to CureVac within a reasonable time after the commencement of any action with respect to a claim shall only relieve CureVac of its indemnification obligations if and to the extent CureVac is actually and materially prejudiced thereby. Without limiting the foregoing indemnity, CureVac will have the right to compromise, settle or defend any such claim or lawsuit (to the extent subject to indemnity by CureVac as set forth herein); provided that (A) no offer of settlement, settlement or compromise by CureVac shall be binding on Genmab without its prior written consent, not to be unreasonably withheld, conditioned or delayed, unless such settlement fully releases Genmab without any liability, loss, cost or obligation incurred by Genmab and in no event shall any settlement or compromise admit or concede that any aspect of any of the Genmab Program Patent Rights, Genmab Other Patent Rights or the Joint Patent Rights is invalid or unenforceable or adversely affect the scope of any of the Genmab Program Patent Rights, Genmab Other Patent Rights or the Joint Patent Rights; and (B) CureVac shall not have authority to admit any wrongdoing or misconduct on the part of any Genmab Indemnified Parties except with Genmab’s prior written consent.

14.3 Additional Indemnification Procedures. The indemnifying Party shall notify the indemnified Party of its intentions as to the defense of the claim in writing within [*****] after the indemnifying Party's receipt of notice of the claim from the indemnified Party. If the indemnifying Party assumes the defense of a claim against an indemnified Party, the indemnifying Party shall have no obligation or liability under this Article 14 as to any claim for which settlement or compromise of such claim or an offer of settlement or compromise of such claim is made by the indemnified Party without the prior written consent of the indemnifying Party. The indemnified Party shall reasonably cooperate with the indemnifying Party in its defense of the claim (including copying and making documents and records available for review and making persons within its control available for pertinent testimony in accordance with the confidentiality provisions of Article 14) at the indemnifying Party's reasonable, pre-approved expense. If the indemnifying Party assumes defense of the claim, the indemnified Party may participate in, but not control, the defense of such claim using attorneys of its choice and at its sole cost and expense (i.e., with such cost and expense not being covered by the indemnifying Party). If the indemnifying Party does not agree to assume the defense of the claim asserted against the indemnified Party (or does not give notice that it is assuming such defense), or if the indemnifying Party assumes the defense of the Claim in accordance with this Section 14.3, but yet fails to defend or take other reasonable, timely action, in response to such claim asserted against the indemnified Party, the indemnified Party shall have the right to defend or take other reasonable action to defend its interests in such proceedings, and shall have the right to litigate, settle or otherwise dispose of any such claim; *provided, however*, that no Party shall have the right to settle a claim in a manner that would adversely affect the rights granted to the other Party hereunder, or would materially conflict with this Agreement, without the prior written consent of the Party entitled to control the defense of such claim, which consent shall not be unreasonably withheld, delayed or conditioned.

14.4 CureVac Representations and Warranties. Subject to the disclosures in the attached Exhibit 14.4 ("**Disclosure Letter**") CureVac represents and warrants to Genmab as of the Effective Date that:

- (i) it is the sole and exclusive owner of the Patent Rights listed in **Exhibit 1.59**;
- (ii) to CureVac's knowledge, all inventors have assigned their rights to the Patent Rights listed in **Exhibit 1.59** to CureVac, and there have been no inventorship or ownership challenges with respect to these Patent Rights;
- (iii) CureVac has the full right, power and authority to grant the rights and licenses it purports to grant hereunder, and neither CureVac nor any of its Affiliates has granted any Third Party any rights or licenses that would interfere or be inconsistent with Genmab's rights and licenses hereunder;

- (iv) to CureVac's knowledge, use of the CureVac Technology by Genmab in accordance with the terms of this Agreement, including Genmab's further Development, Manufacturing and/or Commercialization of each Product will not infringe on the rights of any Third Party, including any Third Party intellectual property rights;
- (v) to CureVac's knowledge, CureVac has received no written notice of or any written demand relating to any threatened or pending litigation which would reasonably lead it to believe that Genmab's exercise of any rights granted by CureVac under this Agreement in respect of the CureVac Technology will infringe any Patent Rights or misappropriate other intellectual property right of any Third Party;
- (vi) to CureVac's knowledge, CureVac has received no currently pending administrative proceedings or litigation or threatened administrative proceedings or litigation seeking to invalidate or otherwise challenge any Curevac Patent Right(s);
- (vii) CureVac has not given any written notice to any Third Party asserting infringement by such Third Party of any of the CureVac Technology and, to CureVac's knowledge, there is no unauthorized use, infringement or misappropriation of the CureVac Technology;
- (viii) CureVac Controls all right, title and interest in and to the CureVac Technology;
- (ix) The CureVac Technology is free and clear of all encumbrances, security interests, options, and charges of any kind;
- (x) To CureVac's knowledge, the CVCMs are not required for the Development, Manufacture or Commercialization of Products under this Agreement;
- (xi) CureVac has provided to Genmab an accurate, current copy of the BioNTech License and Roche License, respectively, and it will not without Genmab's prior written consent amend the BioNTech License or Roche License in any way that may have an adverse effect on the licenses granted to Genmab herein;
- (xii) CureVac has provided to Genmab accurate, current and redacted copies via the data room of (i) the Acuitas License and (ii) the Arcturus License and (iii) License Agreement for [*****] between CureVac AG and GeneArt AG dated [*****] including any amendments thereto; and (iv) Licensed Agreement between CureVac AG and TriLink Biotechnologies LLC, including any amendments thereto; and CureVac will not without Genmab's prior written consent amend or terminate any of these agreements in any way that may have an adverse effect on the licenses granted to Genmab herein; and

(xiii) to CureVac's knowledge, CureVac is not in material breach of the Acuitas License or Arcturus License, there is no current dispute under the Acuitas License or Arcturus License and any such agreement is in full force and effect in accordance with its terms.

14.5 Genmab Representations and Warranties. Genmab represents and warrants to CureVac that at the time of [*****]. For avoidance of doubt, such representation and warranty shall only apply with respect to the Antibody or Antibody Combination to be included in the Product and shall not apply to any Curevac Technology, Other Technology or LNP Technology.

14.6 Representations, Warranties of the Parties to Each Other. CureVac and Genmab each represents and warrants and covenants with respect to itself only as of the Effective Date that:

- (i) the execution, delivery and performance of this Agreement have been duly authorized by all necessary action on the part of such Party, its officers and directors, and does not conflict with, violate, or breach any agreement to which such Party is a party, or such Party's corporate charter, bylaws or similar organizational documents;
- (ii) this Agreement constitutes a legal, valid and binding obligation of such Party that is enforceable against it in accordance with its terms, except as such enforceability may be limited by general principles of equity or to applicable competition, bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies;
- (iii) it is a company or corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction in which it is incorporated;
- (iv) it has not, and will not, after the Effective Date and during the Term, grant any right to any Third Party that would conflict with the rights granted to the other Party hereunder (but only while such rights remain in effect in accordance with the terms of this Agreement); and
- (v) it has not, and will not, after the Effective Date and during the Term, knowingly use any employee, agent, contractor or consultant in connection with the Development or Commercialization of Products who has been debarred by any governmental authority, or, to such Party's knowledge, is the subject of debarment proceedings by a governmental authority.

14.7 Compliance with Law. Each Party shall comply with all Applicable Laws in its performance of activities contemplated under this Agreement.

- 14.8 Diligence of Genmab.** [*****]. CureVac acknowledges and agrees that it has provided all information relating to CureVac Technology that CureVac reasonable believes is necessary for Genmab to conduct and complete a proper due diligence relating to the Collaboration Targets and Products, and that it has answered truthfully to all questions of Genmab relating to the due diligence of the CureVac Technology.
- 14.9 Disclaimer** THE REPRESENTATIONS AND WARRANTIES OF THE PARTIES SET FORTH IN THIS AGREEMENT ARE THE SOLE AND EXCLUSIVE REPRESENTATIONS AND WARRANTIES OF THE PARTIES RELATING TO OR MADE IN CONNECTION WITH THIS AGREEMENT, AND NEITHER PARTY MAKES OR HAS MADE ANY REPRESENTATIONS OR WARRANTIES NOT EXPRESSLY SET FORTH IN THIS AGREEMENT. CUREVAC AND GENMAB ARE NOT RELYING ON, AND EACH HEREBY DISCLAIMS, ALL REPRESENTATIONS AND WARRANTIES NOT EXPRESSLY CONTAINED HEREIN (WHETHER EXPRESS OR IMPLIED), INCLUDING WITH RESPECT TO EACH OF THEIR RESEARCH, DEVELOPMENT AND COMMERCIALIZATION EFFORTS HEREUNDER, WHETHER THE PRODUCTS CAN BE SUCCESSFULLY DEVELOPED OR MARKETED, THE ACCURACY, PERFORMANCE, UTILITY, RELIABILITY, TECHNOLOGICAL OR COMMERCIAL VALUE, COMPREHENSIVENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WHATSOEVER OF THE PRODUCTS, OR THE NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.
- 14.10 Limitation of Liability.** IN NO EVENT SHALL EITHER CUREVAC OR GENMAB BE LIABLE FOR REMOTE, SPECULATIVE, PUNITIVE OR EXEMPLARY, OR OTHER SPECIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THIS AGREEMENT BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY (OTHER THAN (A) PUNITIVE OR EXEMPLARY DAMAGES REQUIRED TO BE PAID TO (I) A THIRD PARTY PURSUANT TO A NON-APPEALABLE ORDER OF A COURT OF COMPETENT JURISDICTION IN CONNECTION WITH A THIRD PARTY CLAIM FOR WHICH THE INDEMNIFIED PARTY IS ENTITLED TO INDEMNIFICATION HEREUNDER OR (II) A PARTY PURSUANT TO A NON-APPEALABLE ORDER OF A COURT OF COMPETENT JURISDICTION IN CONNECTION WITH A VIOLATION OF PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS, (B) SUCH DAMAGES ARISING OUT OF ANY BREACH OF ARTICLE 13 OR (C) SUCH DAMAGES ARISING OUT OF THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LIABLE PARTY). Notwithstanding the foregoing, it is expressly understood and agreed that nothing contained in this Section 14.10 shall limit, alter, or waive in any manner or respect any defenses available to any Person, any burdens of proof or legal standards required to be met by any Person under Applicable Laws or any indemnification rights or obligations of either Party.

15. **TERM AND TERMINATION.**

- 15.1 **Term.** The term of this Agreement will commence on the Effective Date and end on the expiration of all applicable royalty payment obligations to CureVac under this Agreement, unless terminated earlier according to the terms and conditions of this Agreement (“**Term**”). Upon expiry of this Agreement in a country and provided and to the extent that this Agreement is not terminated after such expiry by CureVac in accordance with Sections 15.4 and 15.5, Genmab’s licenses under Article 2 for such country shall become a fully paid-up, perpetual, and non-exclusive license.
- 15.2 **Termination by CureVac.** CureVac is entitled to terminate this Agreement in its entirety, if Genmab has not made a Product Selection in relation to the First Collaboration Program within [*****] after the Effective Date or has not exercised an Option within the Option Period.
- 15.3 **Termination at Will by Genmab.** Genmab may terminate this Agreement in its entirety or on a Program-by-Program (excluding any Opt-In Program), at any time without cause upon (i) [*****] prior written notice to CureVac before the end of the last to expire Research Period (to be determined on a Program-by-Program basis or (ii) upon [*****] prior written notice to CureVac after the end of the last to expire Research Period (to be determined on a Program-by-Program basis). In the event Genmab decides to cease permanently the further research and Development under the First Collaboration Program, or under any Other Pre-IND Program, including the Development of a Product resulting from any such Program, it shall promptly inform the JRC or Collaboration Committee, as applicable, hereof for discussion with the JRC/Collaboration Committee, and unless otherwise agreed within the JRC/Collaboration Committee, Genmab shall terminate this Agreement with respect to the First Collaboration Target and First Program Antibody, or the Optioned Target and respective Other Program Antibody, as applicable. For the termination of an Opt-In Program the terms and conditions of Sections 7.8 and 7.9 shall apply. During such termination periods, as applicable, the Parties shall cooperate in the wind down of activities under this Agreement or under the Program being terminated in a commercially reasonable manner.
- 15.4 **Termination for Cause by Either Party.** In the event that either Party (“**Breaching Party**”) commits a material breach or default of any of its obligations hereunder of a general nature under this Agreement or in relation to any specific Program (“**Program Breach**”) the other Party hereto (“**Non-Breaching Party**”) may give the Breaching Party written notice of such material breach or default, and shall request that such material breach or default be cured as soon as reasonably practicable. In the event that the Breaching Party fails to cure such breach or default within [*****] after the date of the Non-Breaching Party’s written notice thereof (in the event of default of payment within [*****] after the date of the Non-Breaching Party’s notice), the Non-Breaching Party may (i) terminate this Agreement in the event of a material breach of general nature; or (ii) terminate the Program in the case of a Program Breach, by giving written notice of termination to the Breaching Party. In the event the Breaching Party indicates in writing that it will be unable or is unwilling to cure the breach, this Agreement or the Program, as applicable, may be terminated by the Non-Breaching Party with immediate effect. If following the Commercialization of a Product the breach relates to one country only or a group of countries of the Territory the Non-Breaching Party shall only have the right to terminate this Agreement in relation to such country or countries. If the Breaching Party in good faith disputes such material breach or disputes the failure to cure or remedy such material breach and provides written notice of that dispute to the Non-Breaching Party within the [*****] period, then the matter will be addressed under the dispute resolution provisions in Section 17.5, and the Non-Breaching Party may not terminate this Agreement, or the Program as applicable, until it has been determined under such dispute resolution procedure that the Non-Breaching Party is in material breach of this Agreement or has committed a Program Breach, as the case may be. Termination of this Agreement in accordance with this Section 15.4 shall not affect or impair the Non-Breaching Party’s right to pursue any legal remedy, including the right to recover damages, for any harm suffered or incurred by the Non-Breaching Party as a result of such breach or default.

15.5 [*****].

15.6 **Termination Generally.** The termination of the Agreement in whole or in part under this Section 15 shall not create any obligations to undo or refund (in Dutch “*ongedaanmakingsverbintenissen*”) services rendered and payments made in accordance with the Agreement prior to the effective date of the termination.

16. **CONSEQUENCES OF TERMINATION.**

16.1 **Termination Due to CureVac’s Breach.** If Genmab terminates this Agreement or a Program under Section 15.3, the rights and obligations of the Parties hereunder shall terminate (either in their entirety or in relation to the particular Program) as of the effective date of such termination and there shall be the following consequences (to be interpreted on a Program basis in the event of termination of a Program)

- (i) no later than [*****] after the effective date of such termination, each Party shall return or cause to be returned to the other Party or, at the other Party’s option, destroy (and certify in writing the destruction of) all Confidential Information in tangible form received from the other Party and all copies in any medium thereof; *provided, however*, that each Party may retain any Confidential Information reasonably necessary for such Party’s continued practice under any license(s) which do not terminate pursuant to this Section 16.1, and may retain the Confidential Information solely for the purpose of ensuring its compliance with this Agreement and Applicable Law by electronic files created in the ordinary course of business during automatic system back-up procedures pursuant to its electronic record retention and destruction practices that apply to its own general electronic files and information so long as such electronic files are (A) maintained only on centralized storage servers (and not on personal computers or devices), (B) not accessible by any of its personnel (other than its information technology specialists), and (C) are not otherwise accessed subsequently except with the written consent of the other Party or as required by law. Such retained copies of documents and Confidential Information shall remain subject to the confidentiality and non-use obligations set forth in this Agreement;

- (ii) Subject to Section 16.1(iii) below CureVac shall, within [*****] after the effective date of such termination return or cause to be returned to Genmab all substances or compositions delivered or provided by Genmab, as well as any other Genmab Material provided by Genmab in any medium;
- (iii) each Party shall pay all amounts then due and owing as of the termination effective date;
- (iv) CureVac shall provide access to Genmab, to the extent not previously provided, to the CureVac Know-How (other than the Know-How included in the CureVac Manufacturing Technology) in its possession or under its Control relating to the Collaboration Targets and Products;
- (v) Unless otherwise explicitly agreed in the Early Clinical Supply Agreement or any MSA, termination shall not affect the operation of the Early Clinical Supply Agreement or any MSA;
- (vi) effective only in the event of such termination, CureVac hereby grants to Genmab an exclusive (even as to CureVac) and sublicensable license in the Field and in the Territory under the CureVac Technology to Develop, Manufacture and Commercialize any Products identified prior to termination, *provided, however*, that any payment obligations under Article 10 shall survive the termination of the Agreement in consideration for the exclusive license of Genmab under this Section 16.1(vi); and
- (vii) except as set forth in this Section 16.1 and for the surviving provisions set forth in Section 16.3 below, the rights and obligations of the Parties hereunder shall terminate.

For the avoidance of doubt, the rights and obligations of Genmab and CureVac under this Section 16.1 in the event of a termination due to CureVac's breach shall not exceed or be in any way broader than the rights and obligation of Genmab and CureVac under the Agreement.

16.2 Termination Due to Genmab's Breach under 15.4, [***], CureVac's termination under Section 15.2 or Genmab's termination under Section 15.3.** If CureVac terminates this Agreement as a whole or with respect to a specific Program under Sections 15.2, 15.4 or 15.5, or if Genmab terminates this Agreement as a whole or with respect to a specific Program under Section 15.3, the rights and obligations of the Parties hereunder with respect to the specific Program or all Programs, as the case may be, shall terminate as of the effective date of such termination and:

- (i) Genmab's licenses under Article 2 of this Agreement and any sub-licenses under Article 4 shall automatically lapse and all of CureVac's rights to the CureVac Technology automatically revert back to CureVac;
- (ii) no later than [*****] after the effective date of such termination, each Party shall return or cause to be returned to the other Party or, at the other Party's option, destroy (and certify in writing the destruction of), all Confidential Information of the Disclosing Party in tangible form received from the other Party and all copies in any medium thereof; *provided, however*, that each Party may retain any Confidential Information reasonably necessary for such Party's continued practice under any license(s) which do not terminate pursuant to this Article 16, and may retain the Confidential Information solely for the purpose of ensuring its compliance with this Agreement and Applicable Law by electronic files created in the ordinary course of business during automatic system back-up procedures pursuant to its electronic record retention and destruction practices that apply to its own general electronic files and information so long as such electronic files are (A) maintained only on centralized storage servers (and not on personal computers or devices), (B) not accessible by any of its personnel (other than its information technology specialists), and (C) are not otherwise accessed subsequently except with the written consent of the other Party or as required by law. Such retained copies of documents and Confidential Information shall remain subject to the confidentiality and non-use obligations set forth in this Agreement;
- (iii) each Party shall pay all amounts then due and owing as of the termination effective date;
- (iv) at the request of CureVac, Genmab grants to CureVac a non-exclusive, royalty-free, perpetual and worldwide license [*****] under the Genmab Program Patent Rights required to Develop, Manufacture and/or Commercialize products containing one or more mRNA construct(s) that is/are designed to express an Antibody or Antibody Combination, as applicable, directed at the respective Collaboration Target(s) or Collaboration Target Combination(s) covered by the termination. For clarity, such unblocking license to Genmab Program Patent Rights shall only comprise rights to target class-related or target-related Genmab Inventions, including the examples of Inventions set out in **Exhibit 11.3**, Sections 2(b), 2(c), 2(d), 2(e), 2(f), 2(g) (solely to the extent referring to Sections 2(b), 2(c), 2(d), 2(e) or 2(f)), 2(h) (solely to the extent referring to Sections 2(b), 2(c), 2(d), 2(e) or 2(f) via Section 2(g)), 2(q), 2(r), 2(u) and 2(v), and shall not include a license to any specific Antibody sequence(s), Program Antibody(-ies), Program Antibody Combination(s) or Products nor any rights in Genmab Background Technology; and
- (v) at the request of CureVac, Genmab will enter into good faith discussions with CureVac regarding the possibility of [*****]. For avoidance of doubt, neither Party shall have any obligation to enter into any agreement regarding [*****] comprised by the termination.

16.3 Effect of Expiration or Termination; Survival. Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to such expiration or termination. Any expiration or termination of this Agreement shall be without prejudice to the rights of either Party against the other accrued or accruing under this Agreement prior to expiration or termination. The provisions of Articles 1, (to the extent required to give effect to other surviving provisions), 11, 12, 13 and 16 and Sections 2.5, 2.7, 5.8, 14.1, 14.2, 14.3, 14.9, 14.10, 17.3, 17.4, 17.5, 17.7, 17.8, 17.11, 17.12, 17.13, 17.14 and all other provisions contained in this Agreement that by their explicit terms or from which it is clear from the context survive expiration or termination of this Agreement, and any schedules contained in this Agreement to which reference is made in any surviving term, shall survive the expiration or termination of this Agreement. In the event of a termination of this Agreement with respect to only one of the Programs, and continuation of other Programs under this Agreement, the termination and consequences of termination provisions only apply to the terminated Program, and the Agreement will remain in full force and effect with respect to the continuing Programs.

17. GENERAL PROVISIONS.

17.1 Assignment. This Agreement may not be assigned or otherwise transferred by either Party without the prior written consent of the other Party, which consent will not be unreasonably withheld, conditioned or delayed; *provided, however*, each of the Parties may, without such consent, but with notification, assign this Agreement and its rights and obligations hereunder to any of its Affiliates or in connection with the transfer or sale of all or substantially all of the portion of its business to which this Agreement relates or in the event of its merger or consolidation with a Third Party. Further, Genmab may, without such consent but with notification, assign its rights and obligations on a Program-by-Program basis to an Affiliate [*****]. Any permitted assignee will assume all obligations of its assignor under this Agreement in writing concurrent with the assignment. Any purported assignment in violation of this Section 17.1 will be void. Except as otherwise provided herein, this Agreement shall be binding upon and inure to the benefit of the Parties and their successors and permitted assignors under this Section 17.1.

17.2 Force Majeure. If the performance of any part of this Agreement by either Party, or any obligation under this Agreement, is prevented, restricted, interfered with or delayed by reason of any cause beyond the reasonable control of the Party liable to perform, unless conclusive evidence to the contrary is provided, the Party so affected shall, upon giving written notice to the other Party, be excused from such performance to the extent of such prevention, restriction, interference or delay, provided that the affected Party shall use its Commercially Reasonable Efforts to avoid or remove such causes of non-performance and shall continue performance with the utmost dispatch whenever such causes are removed. When such circumstances arise and persist for a period of at least [*****], the Parties shall discuss what, if any, modification of the terms of this Agreement may be required in order to arrive at an equitable solution.

17.3 Notices. All notices which are required or permitted hereunder shall be in writing and sufficient if delivered personally, sent by e-mail, sent by internationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

(i) if to CureVac, addressed to:

CureVac AG
Attention: Chief Executive Officer
with copy to: General Counsel
Address: Paul-Ehrlich-Str. 15
72076 Tübingen, Germany
Email: [*****]

(ii) if to Genmab, addressed to:

Genmab A/S
Attention: [*****]
Email: [*****]

or

[*****]

or

[*****]

or to such other address(es) as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice shall be deemed to have been given: (a) when delivered if personally delivered or sent by e-mail on a Business Day (or if delivered or sent on a non-business day, then on the next Business Day); (b) on the Business Day after dispatch if sent by nationally-recognized overnight courier; or (c) on the [*****] Business Day following the date of mailing, if sent by mail.

17.4 Governing Law. This Agreement and all disputes arising hereunder, shall be exclusively governed by, and interpreted and enforced in accordance with the laws of the Netherlands, without reference to its conflict of laws principles. The United Nations Convention of International Contracts on the Sale of Goods (the Vienna Convention) does not apply to this Agreement.

17.5 Dispute Resolution.

- 17.5.1** Unless otherwise set forth in this Agreement, in the event of any dispute arising out of or in connection with this Agreement, including any alleged breach under this Agreement or any dispute relating to the validity, performance, construction or interpretation of this Agreement, the Parties shall refer such dispute to the CEO (or its C-level delegate) of CureVac and the CEO (or its C-level delegate) of Genmab. If the dispute has not been settled pursuant to the said rules within [*****] following the reference of the dispute to the senior management representatives of the Parties, either Party may submit the dispute to final and binding arbitration.
- 17.5.2** Any dispute arising out of or in connection with this Agreement, including any issue relating to the validity, performance, construction or interpretation of this Agreement, which cannot be resolved amicably between the Parties after following the procedure set forth in Section 17.5.1, shall be submitted to and settled by arbitration in accordance with the NAI Arbitration Rules of the Netherlands Arbitration Institute (the “NAI”) in effect on the date of the commencement of the arbitration proceedings. The existence, nature and details of any such dispute(s), and all communications between the Parties related thereto, shall be considered Confidential Information of the Parties and shall be treated in accordance with the terms of Article 12 above. Any Confidential Information may be disclosed by either Party to counsel, experts or other advisors on the arbitration under obligations of confidentiality. The decision of the arbitrators shall be final and binding upon the Parties. The location of arbitration will be Amsterdam, the Netherlands. The arbitration will be heard and determined by [*****] arbitrator, who will be jointly selected by Genmab and CureVac. If, within [*****] following the date upon which a claim is received by the respondent, the Parties cannot agree on a mutually appointed arbitrator, the arbitration will be heard and determined by [*****] arbitrators, with [*****] arbitrator being appointed by each Party and the [*****] arbitrator being appointed by the NAI directly (without application of the list procedure of article 14 NAI Arbitration Rules). The language of the arbitration proceeding will be English. Notwithstanding the provisions of this Section 17.5.2, each Party shall have the right to seek interim injunctive relief in any court of competent jurisdiction as such Party deems necessary to preserve its rights and to protect its interests.
- 17.6 Severability.** If any provision of this Agreement is determined by any court or administrative tribunal of competent jurisdiction to be invalid or unenforceable, the Parties shall negotiate in good faith a replacement provision that is commercially equivalent, to the maximum extent permitted by Applicable Law, to such invalid or unenforceable provision. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of the other provisions of this Agreement. Nor shall the invalidity or unenforceability of any provision of this Agreement in one country or jurisdiction affect the validity or enforceability of such provision in any other country or jurisdiction in which such provision would otherwise be valid or enforceable.
- 17.7 Entire Agreement and Amendments.** This Agreement, together with all Exhibits attached hereto, constitutes the entire agreement between the Parties regarding the subject matter hereof (including the Products), and supersedes all prior agreements, understandings and communications between the Parties, with respect to the subject matter hereof (including the Products), including the Confidentiality Agreements and Material Transfer Agreement. The foregoing may not be interpreted as a waiver of any remedies available to either Party as a result of any breach prior to the Effective Date, by the other Party of its obligations under the Confidentiality Agreements or Material Transfer Agreement. No modification or amendment of this Agreement shall be binding upon the Parties unless in writing and executed by the duly authorized representative of each of the Parties; this shall also apply to any change of this Section 17.7.

- 17.8 Waivers.** The failure by either Party hereto to assert any of its rights hereunder, including the right to terminate this Agreement due to a breach or default by the other Party hereto, shall not be deemed to constitute a waiver by that Party of its right thereafter to enforce each and every provision of this Agreement in accordance with its terms.
- 17.9 Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.
- 17.10 Independent Contractors.** The Parties are independent contractors and this Agreement shall not constitute or give rise to an employer-employee, agency, partnership or joint venture relationship among the Parties and each Party's performance hereunder is that of a separate, independent entity.
- 17.11 Language.** This Agreement, and any amendments or modifications thereto, shall be executed in the English language. No translation, if any, of this Agreement into any other language shall be of any force or effect in the interpretation of this Agreement or in determination of the intent of either of the Parties hereto.
- 17.12 Headings.** The headings are placed herein merely as a matter of convenience and shall not affect the construction or interpretation of any of the provisions of this Agreement.
- 17.13 Third Parties.** None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party which shall be a Third Party beneficiary to this Agreement.
- 17.14 Costs.** Except as is otherwise expressly set forth herein, each Party shall bear its own expenses in connection with the activities contemplated and performed hereunder.

— Signature page follows —

In Witness Whereof, the Parties have executed this Agreement to be effective as of the Effective Date.

Signed on behalf of
Genmab B.V.

/s/ Jan van de Winkel

Signature of Authorized Officer
Name of Authorized Officer (please print)
Date Signed

Jan van de Winkel
President & CEO
19 December 2019

Signed on behalf of
Genmab B.V.

/s/ David Eatwell

Signature of Authorized Officer
Name of Authorized Officer (please print)
Date Signed

David Eatwell
Executive Vice President & CFO
19 December 2019

Signed on behalf of
CureVac AG

Signature of Authorized Officer
Name of Authorized Officer (please print)
Date Signed

/s/ Franz-Werner Haas

Signed on behalf of
CureVac AG

Franz-Werner Haas
Chief Operating Officer

Signature of Authorized Officer
Name of Authorized Officer (please print)
Date Signed

/s/ Daniel Menichella

CEO, CureVac AG

Daniel Menichella
CEO, CureVac AG

Exhibit 1.13
Patent Rights licensed to BioNTech

[*****]

**Exhibit 1.54
CureVac Know How**

[*****]

**Exhibit 1.59
CureVac Patent Rights**

[***]**

Exhibit 1.77
First Program Antibody

[*****]

Exhibit 1.90
Genmab Know-How

[*****]

Exhibit 1.111
LNP Technology

[*****]

**Exhibit 1.144
Other Technologies**

[*****]

Exhibit 3.2.2
Templates for clearance of proposed Research Program Antibody
and Research Program Antibody Combination

The Research Program Antibody and Research Program Antibody Combination shall be described by providing available information in the following table:

[*****]	[*****]	[*****]	[*****]	[*****]	[*****]

The Research Program Antibody and Research Program Antibody Combination shall be described by providing the following information for each Antibody:

[*****]

Exhibit 5.1.1
FIRST PROGRAM RESEARCH PLAN

[*****]

Exhibit 5.11
Approved Subcontractors

[*****]

Exhibit 6.2
Early Clinical Supply – Key Terms

[*****]

Exhibit 10.6.2
Example of royalty calculations for Single Antibody Products

[*****]

Exhibit 11.3

List of non-limiting examples of ownership of different types of potential Inventions

[*****]

Exhibit 13.6
Press Release

Company Announcement

- Genmab and CureVac enter broad strategic partnership
- Companies to conduct joint research on first program; option for Genmab to initiate three additional programs during 5-year research term
- Genmab will provide CureVac with a USD 10 million upfront payment and make an equity investment in CureVac of 20 million euro
- CureVac eligible to receive milestones between USD 275 million and USD 368 million for each of the potential product candidates, depending on specific product concept

Copenhagen, Denmark and Tübingen, Germany, xx, xxx, 2019 – Genmab A/S (Nasdaq: GMAB) and CureVac, AG announced today that Genmab and CureVac have entered into a research collaboration and license agreement. This strategic partnership will focus on the research and development of differentiated mRNA-based antibody products by combining CureVac's mRNA technology and know-how with Genmab's proprietary antibody technologies and expertise.

“As part of Genmab’s effort to fundamentally transform cancer treatment we have once again entered into a collaboration that will further provide us with the potential to lead innovation in the antibody space,” said Jan van de Winkel, Ph.D., Chief Executive Officer of Genmab. “CureVac’s unique mRNA technology, which uses the body’s own ability to produce specific proteins from nucleic acid, combined with Genmab’s world-class antibody expertise and robust proprietary technology platforms could create multiple novel options for the treatment of patients with cancer.”

“We are delighted to partner with Genmab. Through our agreement focused on mRNA encoding antibodies, we will continue to demonstrate the robustness of our mRNA technology,” said Daniel L. Menichella, Chief Executive Officer of CureVac. “We believe that the collaboration with Genmab represents the first antibody deal in the field of mRNA. It is our hope that the collaboration will be successful for patients, the two companies and their shareholders.”

Under the terms of the agreement Genmab will provide CureVac with a USD 10 million upfront payment. Genmab will also make a 20 million euro equity investment in CureVac. The companies will collaborate on research to identify an initial product candidate and CureVac will contribute a portion of the overall costs for the development of this product candidate, up to the time of an Investigational New Drug Application. Genmab would thereafter be fully responsible for the development and commercialization of the potential product, in exchange for undisclosed milestones and tiered royalties to CureVac. The agreement also includes three additional options for Genmab to obtain commercial licenses to CureVac’s mRNA technology at pre-defined terms, exercisable within a five-year period. If Genmab exercises any of these options, it would fund all research and would develop and commercialize any resulting product candidates with CureVac eligible to receive between USD 275 million and USD 368 million in development, regulatory and commercial milestone payments for each product, dependent on the specific product concept. In addition, CureVac is eligible to receive tiered royalties in the range from mid-single digits up to low double digits per product. CureVac would retain an option to participate in development and/or commercialization of one of the potential additional programs under pre-defined terms and conditions.

Today’s news does not impact Genmab’s 2019 Financial Guidance.

About Genmab

Genmab is a publicly traded, international biotechnology company specializing in the creation and development of differentiated antibody therapeutics for the treatment of cancer. Founded in 1999, the company has two approved antibodies, DARZALEX® (daratumumab) for the treatment of certain multiple myeloma indications, and Arzerra® (ofatumumab) for the treatment of certain chronic lymphocytic leukemia indications. Daratumumab is in clinical development for additional multiple myeloma indications, other blood cancers and amyloidosis. A subcutaneous formulation of ofatumumab is in development for relapsing multiple sclerosis. Genmab also has a broad clinical and pre-clinical product pipeline. Genmab’s technology base consists of validated and proprietary next generation antibody technologies - the DuoBody® platform for generation of bispecific antibodies, the HexaBody® platform, which creates effector function enhanced antibodies, the HexElect® platform, which combines two co-dependently acting HexaBody molecules to introduce selectivity while maximizing therapeutic potency and the DuoHexaBody® platform, which enhances the potential potency of bispecific antibodies through hexamerization. The company intends to leverage these technologies to create opportunities for full or co-ownership of future products. Genmab has alliances with top tier pharmaceutical and biotechnology companies. Genmab is headquartered in Copenhagen, Denmark with core sites in Utrecht, the Netherlands and Princeton, New Jersey, U.S.

About CureVac AG

CureVac is a leading clinical stage company in the field of messenger RNA (mRNA) technology with more than 19 years’ expertise in developing and optimizing this versatile molecule for medical purposes. The principle of CureVac’s proprietary technology is the use of mRNA as a data carrier to instruct the human body to produce its own proteins capable of fighting a wide range of diseases. The company applies its technologies for the development of cancer therapies, antibody therapies, the treatment of rare diseases, and prophylactic vaccines. CureVac has received significant investments, amongst others from dievini Hopp BioTech holding and the Bill & Melinda Gates Foundation. CureVac has also entered into collaborations with multinational corporations and organizations, including Boehringer Ingelheim, Eli Lilly & Co, CRISPR Therapeutics, the Bill & Melinda Gates Foundation, and others.

For more information, please visit www.curevac.com or follow us on Twitter at [@CureVacAG](https://twitter.com/CureVacAG).

Forward Looking Statement for Genmab

This Company Announcement contains forward looking statements. The words “believe”, “expect”, “anticipate”, “intend” and “plan” and similar expressions identify forward looking statements. Actual results or performance may differ materially from any future results or performance expressed or implied by such statements. The important factors that could cause our actual results or performance to differ materially include, among others, risks associated with pre-clinical and clinical development of products, uncertainties related to the outcome and conduct of clinical trials including unforeseen safety issues, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products or technologies obsolete, and other factors. For a further discussion of these risks, please refer to the risk management sections in Genmab’s most recent financial reports, which are available on www.genmab.com and the risk factors included in Genmab’s final prospectus for our U.S. public offering and listing and other filings with the U.S. Securities and Exchange Commission (SEC), which are available at www.sec.gov. Genmab does not undertake any obligation to update or revise forward looking statements in this Company Announcement nor to confirm such statements to reflect subsequent events or circumstances after the date made or in relation to actual results, unless required by law.

Genmab A/S and/or its subsidiaries own the following trademarks: Genmab®; the Y-shaped Genmab logo®; Genmab in combination with the Y-shaped Genmab logo®; HuMax®; DuoBody®; DuoBody in combination with the DuoBody logo®; HexaBody®; HexaBody in combination with the HexaBody logo®; DuoHexaBody®; HexElect®; and UniBody®. Arzerra® is a trademark of Novartis AG or its affiliates. DARZALEX® is a trademark of Janssen Pharmaceutica NV.

Genmab Contacts:

Marisol Peron, Corporate Vice President, Communications & Investor Relations

T: +1 609 524 0065; E: mmp@genmab.com

For Investor Relations:

Andrew Carlsen, Senior Director, Investor Relations

T: +45 3377 9558; E: acn@genmab.com

CureVac Contact:

Thorsten Schüller, Director Communication

T: +49 7071 9883 -1577; E: Thorsten.Schueller@curevac.com

Exhibit 14.4
Disclosure Letter

[*****]

EXECUTION COPY
CONFIDENTIAL

REDACTED

Certain identified information, indicated by [*****], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

DEVELOPMENT AND LICENSE AGREEMENT

This DEVELOPMENT AND LICENSE AGREEMENT (“**Agreement**”), effective as of November 9, 2017 (the “**Effective Date**”), is made by and between CureVac AG, a German stock corporation organized under the laws of Germany, having its principal place of business at Paul-Ehrlich-Strasse 15, 72076 Tuebingen, Germany (“**CureVac**”), and CRISPR Therapeutics AG, a Swiss corporation organized under the laws of Switzerland (“**CRISPR**”), having its principal place of business at Baarerstrasse 14, 6300 Zug, Switzerland. CureVac and CRISPR are each sometimes referred to herein as a “**Party**” and collectively as the “**Parties**.”

RECITALS

A. WHEREAS, CRISPR has an interest in developing and accessing Cas9 mRNA Constructs (as defined below) for use in gene editing therapeutics.

B. WHEREAS, CureVac has a proprietary mRNA technology platform, and an interest in developing Cas9 mRNA Constructs for CRISPR for gene editing applications;

C. WHEREAS, the Parties intend to collaborate with the goals of identifying and optimizing Cas9 mRNA Constructs for certain Programs (as defined below); and

D. WHEREAS, CRISPR and CureVac will enter into a supply agreement, under which CureVac will supply CRISPR such optimized Cas9 mRNA Constructs for use in gene editing applications in certain Programs.

NOW, THEREFORE, the Parties hereby agree as follows:

Article 1
DEFINITIONS

1.1 “**Affiliate**” means any Person that directly or indirectly is controlled by, controls or is under common control with another Person. For the purposes of this definition, the term “control” (including with correlative meanings, the terms “controlled by” and “under common control with”) as used with respect to a Person means (a) in the case of a corporate entity, direct or indirect ownership of voting securities entitled to cast 50% or more of the votes in the election of directors, (b) in the case of a non-corporate entity, direct or indirect ownership of 50% or more of the equity interests with the power to direct the management and policies of such entity, or (c) any other arrangement whereby a Person controls or has the right to control the board of directors or equivalent governing body or management of a corporation or other entity. For the avoidance of doubt, on the Effective Date Casebia Therapeutics LLP (“**Casebia**”) is an Affiliate of CRISPR for all purposes under this Agreement. Regarding CureVac, Affiliate shall not include Mr. Dietmar Hopp and dievini Hopp BioTech holding GmbH & Co. KG and/or any other entity controlled by Mr. Hopp and/or dievini Hopp BioTech holding GmbH & Co. KG. Any such Person shall only be an Affiliate for purposes of this Agreement when and as long as it meets the requirements of this Section 1.1.

1.2 “**Applicable Law**” means any federal, state, local or foreign law (including, common law), statute or ordinance, or any rule, regulation, judgment, order, writ or decree of or from any court, Regulatory Authority or other governmental authority having jurisdiction over or related to the subject item that may be in effect from time to time.

1.3 “**Background Intellectual Property**” shall mean, as applicable, CRISPR Background Intellectual Property or CureVac Background Intellectual Property.

1.4 “**Calendar Quarter**” means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30, and December 31; provided, however, that (a) the first Calendar Quarter of any particular period shall extend from the commencement of such period to the end of the first complete Calendar Quarter thereafter, and (b) the last Calendar Quarter shall end upon the expiration or termination of this Agreement.

1.5 “**Calendar Year**” means each successive period of twelve (12) months commencing on January 1 and ending on December 31.

1.6 “**Cas9 mRNA Construct**” [*****].

1.7 “**Combination Product**” shall have the meaning set forth in Section 1.60 below.

1.8 “**Commercial Supply Agreement**” means an agreement for the supply of Cas9 mRNA Constructs for use by CRISPR, its Affiliates and Sublicensees in Pivotal Clinical Trials and Commercialization.

1.9 “**Commercially Reasonable Efforts**” shall mean, with respect to the efforts to be expended by a Party with respect to any objective, the reasonable, diligent, good faith efforts to accomplish such objective as such Party would normally use to accomplish a similar objective under similar circumstances. It is understood and agreed that with respect to the Development and Commercialization of Licensed Products by CRISPR, such efforts shall be substantially equivalent to those efforts and resources commonly used by similarly situated biotechnology companies with resources similar to CRISPR in the European Union and the United States for products owned by them or to which they have rights, which products are at a similar stage in its Development or product life and are of similar market potential taking into account all scientific, commercial and other factors that such pharmaceutical company would take into account, including efficacy, safety, approved labelling, the competitiveness of alternative products in the marketplace, the expected and actual market exclusivity of the Licensed Products, and the likelihood of receipt of a Regulatory Approval given the Regulatory Authority involved.

1.10 “**Commercialization**” shall mean any and all activities directed to the preparation for sale of, offering for sale of, or sale of Licensed Products, including activities related to marketing, promoting, labelling, packaging, distributing, importing and exporting such Licensed Products, and interacting with Regulatory Authorities regarding any of the foregoing. When used as a verb, to “**Commercialize**” and “**Commercializing**” shall mean to engage in Commercialization, and “**Commercialized**” has a correlative meaning.

1.11 “**Competitive Infringement**” shall have the meaning set forth in Section 8.4(b).

1.12 “**Confidential Information**” means subject to the exceptions in Section 6.2, the information of any nature and in any form that a Party may learn of (including, but not limited to, all documents and/or all data, nucleic acid and protein sequences, chemical structures, software and/or hardware samples, models, methods, descriptions, Know-How, processes, applications and/or knowledge, whether patentable or not), in the performance of the Agreement, and in particular any confidential information relating to the Licensed Intellectual Property, Licensed Products, names of business partners, business strategy, developing strategy, data regarding Licensed Products, their prices and markets, that a Party may receive in the performance of this Agreement. The Know-How within the Licensed Intellectual Property for use in the Field and the terms and conditions of this Agreement are Confidential Information of both Parties.

1.13 “**Controlled**” or “**Controls**” means, when used in reference to a subject item or a right, the legal authority or right of a Party (or any of its Affiliates) (whether by ownership or license, other than pursuant to this Agreement) to grant the right to use such item or right to the other Party, or to otherwise disclose proprietary or trade secret information to such other Party, without violating the terms of any agreement or other arrangement by which such Party is bound.

1.14 “**Cover**” means, with respect to a particular subject matter at issue and the relevant Patent Rights and Know-How, that, but for a license granted to a Party under a claim included in such Patent Rights or under the Know-How, or such Party’s ownership or Control of such Patent Rights or Know-How, the manufacture, use, sale, offer or sale or importation by such Party of the subject matter at issue would infringe such claim or exploit or otherwise use such Know-How or, in the case of a Patent Right that is a patent application, would infringe a claim in such patent application if it were to issue as a patent in a particular country or countries.

1.15 “**CRISPR Background Intellectual Property**” means CRISPR Background Know-How and CRISPR Background Patent Rights and that is not Foreground Intellectual Property. The CRISPR Background Intellectual Property as of the Effective Date is identified in **Attachment A** hereto.

1.16 “**CRISPR Background Know-How**” means any Know-How Controlled by CRISPR as of the Effective Date or thereafter during the Term that is reasonably necessary or useful for the Parties to conduct activities under the Development Program and/or to Develop, Manufacture and Commercialize Licensed Products in accordance with this Agreement.

1.17 “**CRISPR Background Patent Rights**” means any Patent Rights Controlled by CRISPR as of the Effective Date or thereafter during the Term that are reasonably necessary or useful for the Parties to conduct the activities under the Development Program and/or to Develop, Manufacture and Commercialize Licensed Products in accordance with this Agreement.

1.18 “**CRISPR Improvement**” means any improvement, change, modification, variation, revision, update or enhancement to the CRISPR Background Intellectual Property.

1.19 “**CRISPR System**” means a system comprising one or more of the following:

(a) [*****]

(b) [*****] and

(c) [*****]

1.20 “**CureVac Background Intellectual Property**” means the CureVac Background Patent Rights and CureVac Background Know-How, and that is not Foreground Intellectual Property. The CureVac Background Intellectual Property is identified in **Attachment B** hereto. For clarity, CureVac Background Intellectual Property does not include Patent Rights and Know-How in-licensed by CureVac from Acuitas Therapeutics, Inc. and from PharmaJet, Inc.

1.21 “**CureVac Background Know-How**” means all Know-How Controlled by CureVac or its Affiliates as of the Effective Date or thereafter during the Term that is reasonably necessary or useful for Parties to conduct the activities under the Development Program and/or to Develop, Manufacture and Commercialize Licensed Products.

1.22 “**CureVac Background Patent Rights**” means all Patent Rights Controlled by CureVac or its Affiliates as of the Effective Date or thereafter during the Term that are reasonably necessary or useful for the Parties to conduct the activities under the Development Program and/or to Develop, Manufacture and Commercialize Licensed Products.

1.23 “**CureVac Competitor**” means a pharmaceutical and/or biotechnological company that has a primary focus of its business in the development, manufacture (for its own account) or commercialization of therapeutic products or services (for its own account) in the field of pDNA and/or mRNA provided that the Parties acknowledge and agree that the term “CureVac Competitor” does not include contract manufacturing organizations, contract research organizations, or entities that do work on a fee-for-services basis as contract manufacturers for others. For clarity, Boehringer Ingelheim’s contract manufacturing organization would not be deemed a “CureVac Competitor,” even if a Boehringer Ingelheim affiliate (including a parent entity) is developing or commercializing therapeutic products in the field of pNDA and/or mRNA).

1.24 “**CureVac Improvement**” means any improvement, change, modification, variation, revision, update or enhancement to the CureVac Background Intellectual Property.

1.25 “**Development**” shall mean all research, non-clinical, and clinical testing and drug development activities conducted in respect of the Licensed Products for use in the Field, including those reasonably necessary or useful or required by a Regulatory Authority in support of obtaining Regulatory Approvals. “**Development**” shall include generation, validation and optimization, formulation development, delivery system development, non-clinical testing, mechanism studies, toxicology, pharmacokinetics, clinical studies, regulatory affairs activities, statistical analysis and report writing, submission of documents, market research, pharmacoeconomic studies, and epidemiological/real world data studies. “**Develop**” and “**Developed**” have a correlative meaning.

1.26 “**Development Program**” means the research and development program regarding the identification, optimization and selection of Cas9 mRNA Constructs funded as agreed in this Agreement and to be conducted in accordance with the Work Plan and this Agreement. For clarity, all activities conducted under the Development Program shall be distinct from the Development of the Licensed Products and shall not extend to any activities which shall be conducted under the Manufacturing Services Agreement.

- 1.27 **“Development Term”** means the period set forth in the Work Plan to perform all of the activities of the Work Plan.
- 1.28 **“Dual Improvement Intellectual Property”** shall have the meaning set forth in Section 7.1(d)(iii)(C).
- 1.29 **“EMA”** means European Medicines Agency and any successor agency or authority thereto.
- 1.30 **“Executive Officer”** means (a) in the case of CureVac, the Chief Corporate Officer, and (b) in the case of CRISPR, the Chief Business Officer, neither of which may be a member of the JSC. Each Party may change its Executive Officer from time to time by providing written notice to the other Party in accordance with the terms of this Agreement.
- 1.31 **“FDA”** means the United States Food and Drug Administration or its successor.
- 1.32 **“Field”** means all human therapeutic applications in the Programs that make use of a CRISPR System.
- 1.33 **“First Commercial Sale”** means on a Licensed Product-by-Licensed Product and country-by-country basis, the first arm’s-length transaction, transfer or disposition for value by or on behalf of CRISPR or any Affiliate or Sublicensee of CRISPR to a Third Party of such Licensed Product for end use or consumption of such Licensed Product. First Commercial Sale excludes (a) the distribution of reasonable quantities of promotional samples of Licensed Products, or (b) the transfer of Licensed Product to a Third Party to use Licensed Product for the sole purpose of performing preclinical or clinical studies or (c) the transfer of Licensed Product to a Third Party solely for charitable or compassionate use purposes on a named patient basis if the Selling Party transfers Licensed Product at cost of goods or below.
- 1.34 **“First Exercise Period”** has the meaning set forth in Section 7.4.
- 1.35 **“Foreground Intellectual Property”** means the Foreground Patent Rights and the Foreground Know-How.
- 1.36 **“Foreground Know-How”** means the Know-How first conceived, discovered, developed, reduced to practice or generated by either Party or jointly by the Parties under this Agreement.
- 1.37 **“Foreground Patent Rights”** means all Patent Rights that arise from the Foreground Know-How.
- 1.38 **“FTE”** means one employee working full-time for one year, or more than one person working the equivalent of a full-time person, working directly on performing activities under the Development Program, as applicable, where “full-time” is considered [*****] hours for one Calendar Year. No additional payment will be made with respect to any individual who works more than [*****] hours per Calendar Year and any individual who devotes less than [*****] hours per Calendar Year will be treated as an FTE on a pro rata basis based upon the actual number of hours worked divided by [*****].

- 1.39 “**FTE Costs**” means the product of (a) the number of FTEs (proportionately, on a per-FTE basis) used by CureVac or its Affiliates in directly performing activities assigned to CureVac under and in accordance with the Development Program, and (b) the FTE Rate.
- 1.40 “**FTE Rate**” means € [*****].
- 1.41 “**Full Sublicense Rate**” has the meaning set forth in Section 5.3.
- 1.42 “**GLP**” means the then-current practices and procedures set forth in Title 21, United States Code of Federal Regulations, Part 58 (as amended), and any other regulations, guidelines or guidance documents relating to good laboratory practices, or any foreign equivalents thereof in the country in which such studies or clinical trials are conducted or that are otherwise applicable.
- 1.43 “**GLP Toxicology Study**” means, with respect to a Licensed Product, a study conducted in a species, in compliance with GLP, for the purposes of assessing the efficacy, safety or the onset, severity, and duration of toxic effects and their dose dependency with the goal of establishing a profile sufficient to support the filing of an IND.
- 1.44 “**IND**” means any Investigational New Drug application, filed with the FDA pursuant to Part 312 of Title 21 of the U.S. Code of Federal Regulations, including any supplements or amendments thereto. References herein to IND will include, to the extent applicable, any comparable filings outside the United States.
- 1.45 “**Infringement Action**” shall have the meaning set forth in Section 8.4(c).
- 1.46 “**Joint Steering Committee**” shall have the meaning set forth in Section 3.1(a).
- 1.47 “**Jointly-Owned Foreground Intellectual Property**” shall have the meaning set forth in Section 7.1(d)(ii).
- 1.48 “**Jointly-Owned Foreground Know-How**” shall have the meaning set forth in Section 7.1(d)(ii).
- 1.49 “**Jointly-Owned Foreground Patent Rights**” shall have the meaning set forth in Section 7.1(d)(ii).
- 1.50 “**Know-How**” means any and all proprietary data, inventions, methods, information, processes, trade secrets, techniques and technology, whether patentable or not, including discoveries, formulae, practices, biological sequences, test data, analytical and quality control data, manufacturing technology and data, registration dossiers and specifications. Know-How includes any such information comprised or embodied in the Materials, if any.
- 1.51 “**Licensed Intellectual Property**” means the CureVac Background Intellectual Property and any Foreground Intellectual Property solely or jointly owned by CureVac.
- 1.52 “**Licensed Patent Rights**” means any Patent Right which is part of the Licensed Intellectual Property.
- 1.53 “**Licensed Product**” means any product comprising a Cas9 mRNA Construct, where such Cas9 mRNA Construct (a) the research, Development, Manufacture, use, sale, offer for sale or importation of which relies on the use of Know-How within the Licensed Intellectual Property, or (b) the research, Development, Manufacture, use, sale, offer for sale or importation of which in or into a country is Covered by a Valid Claim of a Patent Right or by Know-How within the Licensed Intellectual Property.

1.54 “**Losses**” shall have the meaning set forth in Section 9.1.

1.55 “**Manufacture**” means all manufacturing operations for Cas9 mRNA Constructs and Licensed Products, including all activities related to the synthesis, making, production, processing, purifying, of the Cas9 mRNA Constructs, or any intermediate thereof, including process development, process qualification and validation, scale-up, pre-clinical, clinical and Commercial production and analytic development, product characterization, stability testing, quality assurance, and quality control. “**Manufacturing**” has a correlative meaning.

1.56 “**Manufacturing Services Agreement**” means the Manufacturing Services Agreement between the Parties, dated as of the Effective Date for the pre-clinical and clinical (up to Pivotal Clinical Trials) Manufacture of Cas9 mRNA Constructs.

1.57 “**Marketing Authorization Application**” or “**MAA**” means an application for Regulatory Approval in a country, territory or possession.

1.58 “**Materials**” means the biological materials set forth on **Attachment C** hereto, whether by themselves or incorporated into another material, and any progeny, modifications, mutants, components or derivatives thereof. **Attachment C** may be amended upon the mutual written agreement by the Parties.

1.59 “**NDA**” means a new drug application that is submitted to the FDA for marketing approval for a Licensed Product, pursuant to 21 C.F.R. § 314.3, or any foreign equivalent.

1.60 “**Net Sales**” means with respect to any Licensed Product, the gross amounts received by CRISPR, its Affiliates, distributors and Sublicensees (each, a “**Selling Party**”) from Third Party customers for sales of such Licensed Product, less the following deductions actually incurred, allowed, paid, accrued or specifically allocated in its financial statements in accordance with such Selling Party’s accounting principles, for:

- (a) [*****]
- (b) [*****]
- (c) [*****] and

(d) [*****]

1.61 “**Non-Royalty Sublicense Income**” means any payments, including upfront and milestone payments, that CRISPR or its Affiliate receives in consideration of CRISPR, its Affiliate or Sublicensees granting any sublicense to a Third Party under any Licensed Intellectual Property to a Sublicensee, other than: [*****].

1.62 “**Patent Rights**” means patents and patent applications, together with any unlisted patents and patent applications claiming priority thereto, and any continuations, continuations-in-part, reissues, reexamination certificates, substitutions, divisionals, supplementary protection certificates, renewals, registrations, extensions including all confirmations, revalidations, patents of addition, PCTs, and pediatric and other exclusivity periods and all foreign counterparts thereof, and any patents issued or issuing with respect to any of the foregoing.

1.63 “**Person**” means any individual, firm, corporation, partnership, limited liability company, trust, business trust, joint venture, governmental authority, association or other entity.

1.64 “**Phase 1 Clinical Trial**” means a clinical study of a drug candidate in patients with the primary objective of characterizing its safety, tolerability, and pharmacokinetics and identifying a recommended dose and regimen for future studies as described in 21 C.F.R. 312.21(a), or a comparable clinical study prescribed by the relevant regulatory authority in a country other than the United States. The drug candidate can be administered to patients as a single agent or in combination with other investigational or marketed agents.

1.65 “**Phase 2 Clinical Trial**” means a clinical study of a drug candidate in patients with the primary objective of characterizing its activity in a specific disease state as well as generating more detailed safety, tolerability, and pharmacokinetics information as described in 21 C.F.R. 312.21(b), or a comparable clinical study prescribed by the relevant regulatory authority in a country other than the United States including a human clinical trial that is also designed to satisfy the requirements of 21 C.F.R. 312.21(a) or corresponding foreign regulations and is subsequently optimized or expanded to satisfy the requirements of 21 C.F.R. 312.21(b) (or corresponding foreign regulations) or otherwise to enable a Phase 3 Clinical Trial (e.g., a phase 1/2 trial). The relevant drug candidate may be administered to patients as a single agent or in combination with other investigational or marketed agents.

1.66 **“Phase 3 Clinical Trial”** means a clinical study of a drug candidate in patients that incorporates accepted endpoints for confirmation of statistical significance of efficacy and safety with the aim to obtain Regulatory Approval in any country as described in 21 C.F.R. 312.21(c), or a comparable clinical study prescribed by the relevant regulatory authority in a country other than the United States. The relevant drug candidate may be administered to patients as a single agent or in combination with other investigational or marketed agents

1.67 **“Pivotal Clinical Trial”** means a clinical study of a drug candidate in patients, performed after preliminary evidence suggesting efficacy of such product has been obtained, conducted for inclusion in (a) that portion of the FDA submission and approval process that provides for the continued trials of such product in sufficient numbers of human patients to confirm with statistical significance the safety and efficacy of such Licensed Product sufficient to support Regulatory Approval in the proposed indication, as more fully defined in 21 C.F.R. §312.21(c) or (b) equivalent Regulatory Authority submissions in a country other than the United States.

1.68 **“Program”** means applying the CRISPR System and using a Cas9 mRNA Construct for the following programs: (i) the [*****], in accordance with Section 4.2(a). below, [*****] being set forth on Attachment G, or as substituted in accordance with Section 4.2(b) (**“Program 1”**); (ii) [*****] or (iii) [*****] or as substituted in accordance with Section 4.3 (“[*****]”).

1.69 **“Reduced Sublicense Rate”** has the meaning set forth in Section 5.3.

1.70 **“Regulatory Approval”** means any and all approvals (including pricing and reimbursement approvals, if any), licenses, registrations or authorizations of any national or international or local Regulatory Authority, department, bureau or other governmental entity, necessary for the Manufacture and Commercialization of a Licensed Product in any regulatory jurisdiction. Regulatory Approvals include approvals by Regulatory Authorities of MAAs.

1.71 **“Regulatory Authority”** means, with respect to a country or region, any national (e.g., the FDA for the United States, EMA for the European Union), supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental authority involved in the granting of any approval required by Applicable Laws to Manufacture and Commercialize a relevant Licensed Product in such country or region or, to the extent required in such country or region, price approval, for pharmaceutical products in such country or region.

1.72 **“Regulatory Exclusivity”** means any exclusive marketing rights or data exclusivity rights conferred by any Regulatory Authority with respect to a Licensed Product.

1.73 **“Reserved Program”** shall mean any program that is the subject of a signed agreement between CureVac and a Third Party, or the subject of bona fide ongoing research, development or commercialization activities by CureVac, in each case, that would be breached if such proposed [*****] under this Agreement at the time CRISPR provides the written notice to CureVac as described in Section 4.3(b).

1.74 “**Royalty Term**” on a Licensed-Product by Licensed-Product, and country-by-country basis, the period commencing on the First Commercial Sale of a Licensed Product and ending upon the later of (i) the date on which there is no Valid Claim that would be infringed, absent a license, by the Development, Manufacture or Commercialization of such Licensed Product in such country,(ii) the date on which the Regulatory Exclusivity in such country for such Licensed Product expires; or (iii) ten (10) years after the First Commercial Sale of such Licensed Product in such country.

1.75 “**Solely-Owned Foreground Intellectual Property**” shall have the meaning set forth in Section 7.1(d)(i).

1.76 “**Solely-Owned Foreground Know-How**” shall have the meaning set forth in Section 7.1(d)(i).

1.77 “**Solely-Owned Foreground Patent Rights**” shall have the meaning set forth in Section 7.1(d)(i).

1.78 “**Sublicensee**” means an Affiliate or any Third Party that is granted a sublicense as permitted under Section 7.2, either directly by CRISPR or indirectly by any other Sublicensee hereunder.

1.79 “**Term**” means the period of time beginning on the Effective Date and ending on the expiration of the Royalty Term for all Licensed Products, unless sooner terminated in accordance with the provision of this Agreement.

1.80 “**Territory**” means worldwide.

1.81 “**Third Party**” means any Person other than CRISPR, CureVac and their respective Affiliates.

1.82 “**Third Party Agreement**” has the meaning set forth in Section 7.4

1.83 “**Valid Claim**” means (a) a claim of an issued and unexpired patent which has not been revoked or held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, or (b) a claim of a pending patent application that was filed and has been prosecuted in good faith and has not been (i) cancelled, withdrawn, abandoned or finally disallowed without the possibility of appeal or refiling of such application, or (ii) pending for more than [*****] years since such claim was first presented or is the result of amending another claim pending for more than [*****] years (either in the same application or in another application in the same jurisdiction) so as to add or delete an obvious limitation, so as to make a trivial or non-substantive change, or so as to change a matter of form.

1.84 “**Work Plan**” means the plan setting forth (a) the activities to be undertaken as part of the Development Program, (b) the Party responsible for each such activity, (c) the deliverables, (d) the budget, and (e) timeline for performance, as set forth in **Attachment D** hereto, and as may be amended from time to time with written approval of the JSC during the Development Term. For clarity, on a Program-by-Program basis, the Work Plans shall be limited to the identification, optimization and selection of Cas9 mRNA Constructs and shall not extend to any activities which shall be conducted under the Manufacturing Services Agreement.

Article 2
CAS9 mRNA DEVELOPMENT PROGRAM

2.1 Purpose and Term. The Parties have agreed to engage in the Development Program on the terms and conditions set forth in this Agreement. As part of the Development Program, the Parties will work together to identify and optimize Cas9 mRNA Constructs for use in gene editing therapeutics. The Development Program will be undertaken and performed during the Development Term.

2.2 Diligence; Standards of Conduct with respect to the Work Plan. Each Party agrees to use Commercially Reasonable Efforts to perform the tasks assigned to such Party under the Work Plan in a timely and effective manner, and each Party further agrees to conduct its activities under the Work Plan in a good scientific manner and in compliance in all material respects with Applicable Law. In the event of any inconsistency between the Work Plan and this Agreement, the terms of this Agreement will prevail. Without limiting the foregoing, in all events, both Parties will provide all resources necessary to support the Development Program, including providing the appropriate technical resources and personnel with the appropriate skill, training and expertise. All disputes regarding the level of efforts and resources dedicated by a Party to the performance of the Development Program will be escalated to the JSC.

2.3 Amendments to the Work Plan. During the Development Term, each Party will have the right to propose modifications or amendments to the Work Plan; provided, however, that any modifications or amendments to the Work Plan that are proposed by either Party will be subject to review and prior written approval by the JSC pursuant to Section 3.1(b)(ii) and subject to Section 3.2.

2.4 Decision Making. Except as otherwise expressly provided in this Agreement, all matters regarding the Work Plan will be decided by consensus by the JSC pursuant to Section 3.1(d) and subject to Section 3.2.

2.5 Progress. During the Development Term each Party will keep the other Party reasonably informed regarding the progress and results of performance of the Development Program. Without limiting the foregoing, following the end of each Calendar Quarter, each Party will prepare a summary of all work performed to date, such summary to include a discussion of progress against goals set forth in the Work Plan. The Parties will discuss such summary at the next JSC meeting.

2.6 Records. CureVac will maintain complete and accurate records (in the form of technical notebooks or electronic files where appropriate) of all work conducted by it under the Work Plan and all Know-How resulting from such work. Such records will fully and properly reflect all work done and results achieved in the performance of the Work Plan in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. CRISPR will have the right to receive copies of such records maintained by CureVac, including in electronic format if maintained in such format, at reasonable times to the extent reasonably necessary to perform obligations or exercise rights under this Agreement. Promptly following completion of the Work Plan, CureVac will deliver a final report to CRISPR summarizing all work performed pursuant to the Work Plan, the results thereof and comparing the results thereof against any goals set forth in the Work Plan.

2.7 Subcontracts. Except as outlined in the Work Plan, CureVac may not subcontract any of its obligations under this Agreement absent CRISPR's prior written consent.

2.8 Manufacture and Supply. All Cas9 mRNA Constructs required for use by CRISPR, its Affiliates and Sublicensees in accordance with this Agreement for the non-clinical and Phase 1 Clinical Trial and Phase 2 Clinical Trial Development of the Licensed Products shall comport with or incorporate CureVac's most advanced required Manufacturing technology, methods and materials and shall be Manufactured by or on behalf of CureVac in accordance with Applicable Laws and the terms and conditions of the Manufacturing Services Agreement attached hereto as **Attachment E**. The potential supply of Cas9 mRNA Constructs required for use by CRISPR its Affiliates and Sublicensees for Pivotal Clinical Trials and Commercial supply and a technology transfer in the event CureVac will not supply such Cas9 mRNA Constructs is set forth in the Manufacturing Services Agreement.

2.9 Supply of Material. CureVac will use Commercially Reasonable Efforts to supply to CRISPR, its Affiliates and Sublicensees the Materials set forth in **Attachment C** hereof. CRISPR will use such Materials only in accordance with the Work Plan as set forth in **Attachment D** and otherwise in accordance with the terms and conditions of this Agreement and will not reverse engineer or chemically analyze the Material except as expressly provided for in the Work Plan.

2.10 Regulatory Filings. CureVac hereby grants to CRISPR and its Affiliates, the right of cross-reference in any regulatory filing, Regulatory Approval, drug master file or other regulatory documentation (including orphan drug applications and designations) Controlled by CureVac or its Affiliates in any country in the Territory that relate to any Licensed Product to permit CRISPR or its Affiliates to comply with its regulatory obligations with respect to the Licensed Product in the Field in the Territory, or to exercise CRISPR's or its Affiliate's rights hereunder or under the Manufacturing Services Agreement or the Commercial Supply Agreement. CureVac shall do and cause to be done such reasonable acts and things, as may be necessary under, or as CRISPR may reasonably request, to effectuate the rights of cross-reference contemplated in this Section 2.10. The foregoing grant is sublicenseable (through multiple tiers) by CRISPR and its Affiliates. Notwithstanding anything to the contrary in this Agreement, unless required by any Applicable Law or Regulatory Authority, CureVac shall not withdraw or inactivate any regulatory filing that CRISPR references or otherwise uses pursuant to this Section 2.10.

Article 3 GOVERNANCE

3.1 Joint Steering Committee.

(a) Formation; Composition. Within [*****] days following the Effective Date, the Parties will establish a joint steering committee (the "**Joint Steering Committee**" or "**JSC**") comprised of two (2) representatives from each Party (or appointed representatives of an Affiliate of such Party) with sufficient seniority within the applicable Party to make decisions arising within the scope of the JSC's responsibilities and each Party will appoint one of its representatives to the JSC as such Party's "**Work Plan Leader**". The Parties' initial representatives to the JSC, and Work Plan Leaders, are set forth on **Attachment F** hereto. The JSC may change its size from time to time by mutual consent of its members; *provided* that the JSC will consist at all times of an equal number of representatives of each of CureVac and CRISPR. Each Party may replace any or all of its JSC representatives at any time upon written notice to the other Party. The JSC may invite non-members to participate in the discussions and meetings of the JSC; provided that such participants (i) will have no voting authority at the JSC and (ii) are bound under written obligations of confidentiality no less protective of the other Party's Confidential Information than those set forth in this Agreement. Each meeting of the JSC will be co-chaired by a representative of each Party. The role of the chairpersons will be to convene and preside at meetings of the JSC. The chairpersons will have no additional powers or rights beyond those held by the other JSC representatives. Each Party's Work Plan Leader will be the primary point of contact for the other Party on all matters relating to the activities of the Work Plan.

(b) Specific Responsibilities. The JSC will:

- (i) oversee the performance of the Work Plan;
- (ii) review the progress of activities under the Work Plan, all reports submitted by the Parties in accordance with Section 2.5, and review and approve any amendments thereto, including any necessary amendments to the Work Plan budget as a result of any amendment to the Work Plan, any other amendment to the Work Plan budget and any amendment to the timelines or activities under the Work Plan;
- (iii) agree on amendments of the Work Plan;
- (iv) work to resolve any disagreement between the Parties relating to the Work Plan;
- (v) coordinate Patent Right applications regarding Foreground Intellectual Property; and
- (vi) perform such other functions as appropriate, to further the purposes of this Agreement, in each case as agreed in writing by the Parties.

(c) Meetings. During the Development Term, the JSC will meet at least quarterly for the first year, and at least twice a year thereafter. Following the expiration of the Development Term, the Parties may agree to reduce the number of meetings to at least twice a year until all [*****] Programs have initiated a Phase 1 Clinical Trial, unless otherwise agreed by the Parties. The JSC may meet in person, by videoconference or by teleconference. Notwithstanding the foregoing, at least [*****] per year will be in person unless the Parties mutually agree in writing to waive such requirement. In-person JSC meetings will be held at locations alternately selected by CureVac and by CRISPR. Each Party will bear the expense of its respective JSC members' participation in JSC meetings. Meetings of the JSC will be effective only if at least [*****] of each Party is present or participating in such meeting. Prior to each meeting of the JSC, CureVac and CRISPR will take turns to (i) prepare a written report detailing the work performed to date under the Work Plan and evaluating such work in relation to the goals of the Work Plan and (ii) provide such other information as is reasonably requested by the JSC. On a Program-by-Program basis, after each Program has initiated a Phase 1 Clinical Trial, CRISPR shall provide CureVac with bi-annual reports summarizing all material matters and data relating to the Programs, the results achieved in performance of the Development and outlining its further Development activities with respect to such Program. Furthermore, CRISPR will, subject to confidentiality obligations, provide to CureVac copies of Final Study Reports, once they are available, and will respond to any reasonable request from CureVac to obtain information on the status of the Programs. Such reporting shall be available on a Program-by-Program basis until the date of the First Commercial Sale of a Licensed Product for such Program.

(d) Decision Making. The representatives from each Party on the JSC will have, collectively, [*****] on behalf of that Party, and all decision making will be by consensus. Disputes at the JSC will be handled in accordance with Section 3.2.

3.2 Resolution of JSC Disputes.

(a) Within the JSC. Subject to the exception specified below in this Section 3.2, all decisions within the JSC will be made by consensus. If the JSC is unable to reach consensus on any issue for which it is responsible, within [*****] days after a Party affirmatively states that a decision needs to be made, either Party may elect to submit such issue to the Parties' Executive Officers, in accordance with Section 3.2(b).

(b) Referral to Executive Officers. If a Party makes an election under Section 3.2(a) to refer a matter to the Executive Officers, the JSC will submit in writing the respective positions of the Parties to the Executive Officers. The Executive Officers will use good faith efforts in compliance with Section 3.3, which will include at least one in person meeting between such Executive Officers within [*****] days after the JSC's submission of such matter to them. If the Executive Officers are unable to reach unanimous agreement on any such matter, CRISPR will decide such matter, provided that no exercise of such CRISPR's decisionmaking authority on any matter may, without CureVac's prior written consent, not to be unreasonably withheld, conditioned or delayed, (i) result in a material change to the Work Plan that significantly accelerates or decelerates the planned activities or requires allocation by CureVac of personnel significantly greater than or less than those provided for in the Work Plan "significantly" to include anything beyond [*****] percent of the agreed scope, (ii) result in a reduction of CRISPRs diligence obligations under this Agreement, or (iii) otherwise conflict with this Agreement.

3.3 Good Faith. In conducting themselves on the JSC, and in exercising their rights under Section 3.2, all representatives of each Party will consider reasonably and in good faith all input received from the other Party. In exercising any decision making authority granted to it under Section 3.2, each Party will act based on its good faith judgment taking into consideration the best interests of the Development Program

Article 4 DEVELOPMENT AND COMMERCIALIZATION OF LICENSED PRODUCTS

4.1 Development and Commercialization. CRISPR shall have the sole right and responsibility for Developing and Commercializing Licensed Products in the Field, including obtaining necessary Regulatory Approvals, at its sole cost and expense.

4.2 Back-up Approach and Substitution for Program 1.

(a) CRISPR will pursue the primary gene (as set forth in Attachment G) under Program 1. In the event the results of the Development show that the primary gene should not be further pursued, such results to be discussed within the JSC, and CRISPR may select one of the back-up genes in Attachment G to replace the primary gene.

(b) With respect to Program 1, during the [*****] commencing on the Effective Date, CRISPR shall be permitted once to substitute the treatment of [*****] upon notice to CureVac, at no additional cost.

4.3 Program Substitution [*****]

(a) Substitution. With respect to the [*****] Program, during the first [*****] years of this Agreement, CRISPR shall be permitted once to substitute an alternative program for [*****] using the procedures set forth in Section 4.3(b), provided the intended indication has an incidence approximately the same or less than the indication [*****]. The substitution is subject to the substitution fee set forth below, and the milestones set forth in Section 5.4(c) shall not be adjusted for any [*****] Program substitution. For clarity, even if the [*****] Program had already achieved several milestones, the substitution program would have to pay those milestones again.

(b) [*****] Program Substitution Process. CRISPR shall provide CureVac written notice of its request to substitute a target for the [*****] Program within the [*****] years of the Effective Date. If CureVac provides CRISPR notice that a proposed substitution for the [*****] Program is a Reserved Program, CureVac shall notify CRISPR within [*****] days after the date on which CureVac receives notice of the proposed substitution if such proposed substitution is a Reserved Program. CureVac shall, if requested by CRISPR in writing, provide CRISPR with such evidence to support that such proposed substitution is a Reserved Program. If after providing such evidence, CRISPR concludes that such a substitution is not a Reserved Program, CRISPR will so notify CureVac, CureVac will provide such evidence as CureVac believes is reasonably required to establish that such substitution is a Reserved Program to an independent attorney or other expert with experience that is relevant to the dispute and reasonably acceptable to both Parties. Such independent expert will review and make a determination in accordance with this Agreement regarding whether such proposed substitution is a Reserved Program. The independent expert shall promptly notify the Parties of its determination as to whether a proposed substitution is a Reserved Program, but shall not disclose to CRISPR information provided by CureVac in connection with such determination. The independent expert's determination shall be binding on the Parties, absent a manifest error of such expert's determination. If the independent expert determines such proposed substitution is a Reserved Program, CRISPR shall be permitted to select another target for the [*****] Program; if the independent expert determines such proposed substitution is not a Reserved Program, such proposed substitution shall become the target for the [*****] Program.

(c) Substitution Fee. In the event CRISPR chooses to substitute the [*****] Program a Substitution Fee of [*****] US dollars (US\$ [*****]) is due within [*****] days of confirmation of the new target by CureVac, or once the target is confirmed not to be a Reserved Program in accordance with Section 4.3(b) above.

4.4 Diligence. Subject to the terms of this Agreement, CRISPR shall use its Commercially Reasonable Efforts to progress the Development and Commercialization of the Licensed Products in all three Programs in the Field in the Territory. CRISPR shall, inter alia,

(a) conduct all non-clinical and clinical Development activities in a timely manner, and allocate such Development budgets as are commercially reasonable and adequate to progress the non-clinical and clinical Development of Licensed Products hereunder;

(b) when appropriate based on satisfactory data obtained during the nonclinical and clinical Development, use its Commercially Reasonable Efforts to secure all required Regulatory Approvals in at least the EU, the US and Japan (with respect to Japan only, after taking into account, among other things, commercial considerations and disease prevalence of a Program in Japan), following completion of all appropriate clinical trials; and

(c) use its Commercially Reasonable Efforts to make the First Commercial Sale of the Licensed Products in each country following the issuance of the Regulatory Approvals for such country.

The diligence obligations set forth in this Section 4.4 may be satisfied by CRISPR, an Affiliate, or its or their Sublicensees.

Article 5
PAYMENTS; PAYMENT TERMS

5.1 Technology Access Fee. Within [*****] business days following the Effective Date, CRISPR shall pay to CureVac a one-time payment of three million US dollars (US\$ 3,000,000).

5.2 Research Support Payments. On a quarterly basis, CureVac shall provide an invoice to CRISPR setting forth the total FTE Costs (including the amount of time actually spent by CureVac's FTEs on activities under the Work Plan and a brief description of the work performed by such FTEs), and any reasonable and documented out-of-pocket expenses incurred by CureVac in the performance of the CureVac activities under the Work Plan until the date of such invoice, and CRISPR shall, within [*****] days after receiving such invoice, reimburse CureVac for the full amount of such FTE Costs and reasonable out-of-pocket expenses incurred by CureVac; provided that, CRISPR shall not be responsible for the payment of any costs and expenses (including FTE Costs) that are incurred by CureVac for any activities that are not set forth in the then-current Work Plan, and such costs and expenses will be borne entirely by CureVac unless otherwise approved by CRISPR in writing.

5.3 Non-Royalty Sublicense Income.

(a) On a Sublicensee-by-Sublicensee basis, CRISPR will, in addition to Development and Commercial Milestones in accordance with Section 5.4 and royalties on Net Sales in accordance with Section 5.5, pay CureVac the percentage set forth below of Non-Royalty Sublicense Income received by CRISPR or its Affiliates in accordance with the following table:

Stage at which sublicense is granted by CRISPR	% of Non-Royalty Sublicense Income Payable to CureVac for Such Sublicense (“ Full Sublicense Rate ”)	% of Non-Royalty Sublicense Income from Casebia Payable to CureVac for Such Sublicense (“ Reduced Sublicense Rate ”)
[*****]	[*****]	[*****]
[*****]		
[*****]	[*****]	[*****]
[*****]	[*****]	[*****]

In the event CRISPR receives the Non-Royalty Sublicense Income at the Reduced Sublicense Rate from Casebia, CRISPR shall pay the difference to the Non-Royalty Sublicense Income at the Full Sublicense Rate once and if the Third Party who obtained the sublicense from Casebia grants a sub-sublicense to another Third Party. For illustration purposes: If Casebia receives an upfront payment from its Sublicensee in the amount of [*****] US dollars (US\$ [*****]), CRISPR shall pay [*****] US dollars (US\$ [*****] rather than [*****] US dollars (US\$ [*****]) to CureVac. The difference between the Non-Royalty Sublicense Income calculated at the Full Sublicense Rate and the Non-Royalty Sublicense Income calculated at the Reduced Sublicense Rate [*****] shall be paid if and once Casebia's Sublicensee grants a sub-sublicense to a Third Party and makes a first upfront or milestone payment to Casebia. For clarity, no license or sublicenses between CRISPR and any of its Affiliates shall give rise to any payments under this Agreement.

5.4 Development & Commercial Milestones. In consideration of the performance of the Development Program and the licenses granted under this Agreement, CRISPR will pay to CureVac the amounts set forth below within [*****] calendar days following achievement of the applicable milestone by a Licensed Product. Milestones listed below shall be paid one time per Program under this Agreement, and can be satisfied anywhere in the Territory. In the event a milestone event is being skipped, the respective milestone payment is payable once the next consecutive milestone has been achieved, jointly with the milestone payment for such consecutive milestone.

(a) The first achievement of any of the following milestones by a Licensed Product Developed by or on behalf of CRISPR, any of its Affiliates or any Sublicensee in connection with the Program 1:

[*****]

(b) The first achievement of any of the following milestones by a Licensed Product Developed by or on behalf of CRISPR, any of its Affiliates or any Sublicensee in connection with the [*****] Program:

[*****]

(c) The first achievement of any of the following milestones by a Licensed Product Developed by or on behalf of CRISPR, any of its Affiliates or any Sublicensee in connection with the [*****]:

[*****]

5.5 Running Royalties.

(a) Subject to the terms and conditions of this Agreement, on a country-by-country and Licensed Product-by-Licensed Product basis, CRISPR will pay to CureVac a royalty equal to [*****] percent ([*****]%) of Net Sales of Licensed Products sold or transferred by CRISPR, its Affiliates and its Sublicensees in those countries during the Royalty Term applicable to such Licensed Product.

(b) On a country-by-country and Licensed Product-by-Licensed Product basis, the royalty rate that CRISPR shall pay CureVac pursuant to Section 5.5(a), shall be reduced by [*****] percent ([*****]%) if at the time of sale (i) no Valid Claims exist and (ii) Regulatory Exclusivity has expired.

(c) No Multiple Royalties. If the Development, Manufacture, Commercialization or other use of any Licensed Product is (i) Covered in a given country by more than one Patent Right or by a Patent Right and Know-How within the Licensed Intellectual Property, multiple royalties with respect to Net Sales of that Licensed Product in that country shall not be due.

(d) Blended Royalties. With respect to a potential step down in royalty rates to account for the expiry of certain Patent Rights, the Parties acknowledge and agree that the Licensed Intellectual Property licensed under this Agreement may justify royalty rates and/or royalty terms of differing amounts for sales of Licensed Products in the Territory, which rates could be applied separately to Licensed Products involving the exercise of Licensed Patent Rights in the Territory and/or the incorporation of Know How comprised in the Licensed Intellectual Property, and that if such royalties were calculated separately, royalties relating to the Licensed Patent Rights in the Territory and royalties relating to the Know How comprised in the Licensed Intellectual Property would last for different terms. For practicality reasons the Parties have agreed on a blended royalty rate. For clarity, this Section 5.5(d) solely explains the rationale behind the royalty rates agreed by the Parties and does not modify any of the other provisions of this Agreement.

(e) Fully Paid-Up Licenses. With respect to a Licensed Product in a given country, as of the date on which the Royalty Term applicable to such Licensed Product ends, the license grants contained in Section 7.1(a) shall become fully paid-up, royalty-free, perpetual and irrevocable for such Licensed Product in such country.

(f) Timing of Royalty Payments. CRISPR shall make royalty payments owed to CureVac hereunder in arrears, within [*****] days after the end of each Calendar Quarter in which such payment accrues. Each royalty payment shall be accompanied by a report for each country in which sales of Licensed Products occurred in the Calendar Quarter. Such report shall describe the Net Sales of each Licensed Product sold by or on behalf of CRISPR, its Affiliates or Sublicensees during the applicable Calendar Quarter for each country in which sales of any Licensed Product occurred, specifying: the gross sales (if available) and Net Sales in each country's currency, including an accounting of deductions taken in the calculation of Net Sales; the applicable exchange rate to convert from each country's currency to US Dollars; and the royalties payable in US Dollars.

5.6 Royalty Records. CRISPR and its Affiliates and Sublicensees shall keep, for at least [*****] years from the end of the Calendar Year to which they pertain, complete and accurate records of sales by CRISPR, its Affiliates and Sublicensees, as the case may be, of each Licensed Product, in sufficient detail to allow the accuracy of the payments hereunder to be confirmed.

5.7 Third Party Payments. To the extent CRISPR enters into a Third Party Agreement pursuant to Section 7.4, CRISPR shall be entitled to deduct from the then-current sales milestone and royalty payments due to CureVac under this Article 5 the amounts paid (including milestone payments, royalties or other license fees) by CRISPR to such Third Party under such Third Party Agreement; provided, however, that in no event shall the amounts due to CureVac from CRISPR in any Calendar Quarter be reduced by more than [*****]. Any amount that CRISPR is entitled to deduct that is reduced by the foregoing limitation on the deduction, or is otherwise not deducted in a particular Calendar Quarter (for example, if the amount due to CureVac is less than the amount due to such Third Party during such Calendar Quarter), such amount that was not deducted shall be carried forward and CRISPR may deduct such amount from subsequent amounts due to CureVac until the full amount that CRISPR was entitled to deduct is deducted. CureVac agrees to fully cooperate with CRISPR to acquire such rights.

5.8 Review. Subject to the other terms of this Section 5.8, at the request of CureVac, which shall not be made more frequently than once per Calendar Year during the Term, upon at least [*****] days' prior written notice, and at CureVac's expense, CRISPR shall permit an independent certified public accountant selected by CureVac and reasonably acceptable to CRISPR to inspect (during regular business hours) the records required to be maintained by CRISPR relating to royalties payable pursuant to this Agreement. In every case the accountant must have previously entered into a confidentiality agreement with all Parties substantially similar to the provisions of Article 6 and limiting the disclosure and use of such information by such accountant to authorized representatives of the Parties and the purposes germane to this Section 5.8. The Parties shall treat the results of any such accountant's review of such records under this Section 5.8 as Confidential Information of the applicable Party subject to the terms of Article 6. If any such review reveals a deficiency in the calculation and/or payment of royalties by CRISPR, then CRISPR shall promptly reimburse CureVac for such accountant's fees and pay CureVac the revealed amount remaining to be paid.

5.9 Method of Payment. All payments under this Agreement will be transferred to the following CureVac account:

[*****]

5.10 Accounting. All payments due under this Agreement will be made in United States dollars. Conversion of foreign currency to United States Dollars shall be made at the average monthly rate of exchange, using Bloomberg foreign exchange rates, using the conversion rates beginning the second to last business Day of the month preceding the month in which such sales are recorded and ending on the second to last business day of the month in which the sales are recorded.

5.11 Interest. Payments not paid within [*****] business days after the due date under this Agreement shall bear interest at an annual rate of [*****] percent ([*****]%) above the three-month-LIBOR rate of the respective currency for the time period in which such amount is outstanding. If CRISPR disputes the amount of a payment hereunder and does make such payment nonetheless, CRISPR shall be reimbursed the payment plus statutory interest as of the date of CureVac's receipt of CRISPR's notice disputing such payment, once the Parties agree or it is finally adjudicated that CRISPR was not obligated to make such payment.

5.12 Tax Withholding; Restrictions on Payment. All payments under or in connection with this Agreement shall be inclusive of any income taxes and each Party shall be responsible for its own income taxes assessed by a tax or other authority. If laws, regulations or rules require that taxes be withheld with respect to any payments by CRISPR to CureVac under this Agreement, CRISPR will: (a) deduct those taxes from the remittable payment as required by law from, (b) pay the taxes to the proper taxing authority, and (c) send evidence of the obligation together with proof of tax payment to CureVac on a timely basis following that tax payment. Each Party agrees to cooperate with the other Party in claiming refunds or exemptions from such deductions or withholdings under any relevant agreement or treaty which is in effect, and CRISPR shall forward any refund payments to CureVac without undue delay. The Parties shall discuss applicable mechanisms for minimizing such taxes to the extent possible in compliance with Applicable Laws, regulations and rules.

5.13 VAT. All payments due to the terms of this Agreement are expressed to be exclusive of value added tax (VAT) or similar indirect taxes (e.g., Goods and Service tax). VAT/indirect taxes shall be added to the payments due to the terms if legally applicable.

5.13 Refund; Offset. The payments made under this Article 5 are in no event refundable or creditable.

Article 6
CONFIDENTIALITY

6.1 Confidential Obligations. Each Party agrees that a Party (the “**Receiving Party**”) receiving Confidential Information of the other Party (the “**Disclosing Party**”) (or that has received any such Confidential Information from the other Party prior to the Effective Date) in connection with this Agreement shall, subject to Section 6.2 and Section 6.3, (a) maintain in confidence such Confidential Information using not less than the efforts such Receiving Party uses to maintain in confidence its own proprietary industrial information of similar kind and value, but in no circumstances less than a reasonable standard of care, (b) not disclose such Confidential Information to any Third Party without the prior written consent of the Disclosing Party, except for disclosures expressly permitted below, and (c) not use such Confidential Information for any purpose except those expressly permitted by this Agreement, including the exercise of rights and satisfaction of obligations under this Agreement.

6.2 Exceptions. The obligations in Section 6.1 shall not apply with respect to any portion of the Confidential Information that the Receiving Party can show by competent written proof:

(a) is publicly disclosed by the Disclosing Party, either before or after it is disclosed to the Receiving Party by or on behalf of the Disclosing Party;

(b) was known to the Receiving Party or any of its Affiliates, without any obligation to keep it confidential or any restriction on its use, prior to disclosure by the Disclosing Party;

(c) is subsequently disclosed to the Receiving Party or any of its Affiliates by a Third Party lawfully in possession thereof and without any obligation to keep it confidential or any restriction on its use;

(d) is published by a Third Party or otherwise becomes publicly available or enters the public domain without violation of this Agreement by the Receiving Party or any person for whom the Receiving Party is responsible pursuant to Section 6.3(c), either before or after it is disclosed to the Receiving Party; or

(e) is independently Developed by or for the Receiving Party or its Affiliates without reference to or reliance upon the Disclosing Party’s Confidential Information.

6.3 Authorized Disclosure. The Receiving Party may disclose Confidential Information belonging to the Disclosing Party, and Confidential Information deemed to belong to both Parties under the terms of this Agreement, to the extent (and only to the extent) such disclosure is reasonably necessary in the following instances:

(a) subject to Section 6.4, complying with Applicable Laws (including the rules and regulations of the Securities and Exchange Commission or any national securities exchange) and with judicial or administrative process, if in the reasonable opinion of the Receiving Party’s counsel, such disclosure is necessary for such compliance, *provided* that the Disclosing Party is informed, to the extent practicable, of the obligation of disclosure, so that the Disclosing Party may oppose or limit such disclosure obligation and *provided* the Receiving Party limits the disclosure to the strict minimum in order to comply with its obligations;

(b) disclosure by the Parties of the existence of this Agreement in any annual report to stockholders, filings with the Securities and Exchange Commission and other Regulatory Authorities and communications with securities analysts and stockholders; and

(c) disclosure, solely on a “need to know basis,” to Affiliates, potential or actual research and development collaborators, subcontractors, investment bankers, investors, lenders, shareholders, or other potential or actual financial or strategic partners, and each of the Parties’ respective directors, employees, contractors, agents, legal counsel and accountants, each of whom prior to disclosure must be bound by obligations of confidentiality and non-use no less restrictive than the obligations set forth in this Article 6, which for avoidance of doubt, will not permit use of such Confidential Information for any purpose except those permitted by this Agreement, including the exercise of rights and satisfaction of obligations under this Agreement; *provided, however*, that, in each of the above situations, the Receiving Party shall remain responsible for any failure by any Person who receives Confidential Information pursuant to this Section 6.3 to treat such Confidential Information as required under this Article 6.

If and whenever any Confidential Information is disclosed in accordance with this Section 6.3, such disclosure shall not cause any such information to cease to be Confidential Information except to the extent that such disclosure results in a public disclosure of such information (otherwise than by breach of this Agreement). Where reasonably possible and subject to Section 6.4, the Receiving Party shall notify the Disclosing Party of the Receiving Party’s intent to make any disclosures pursuant to Section 6.3(a) or 6.3(b) sufficiently prior to making such disclosure so as to allow the Disclosing Party adequate time to take whatever action it may deem appropriate to protect the confidentiality of the information, and the Receiving Party will provide reasonable assistance to the Disclosing Party with respect thereto; *provided* that, in any event, the Receiving Party will use reasonable measures to ensure confidential treatment of such information and shall only disclose such Confidential Information of the Disclosing Party as is necessary to comply with such Applicable Laws or judicial process.

6.4 Securities Filings. If either Party proposes to file with the Securities and Exchange Commission or the securities regulators of any state or other jurisdiction a registration statement or any other disclosure document that describes or refers to the terms and conditions of this Agreement under the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or any other Applicable Law, the Party shall notify the other Party of such intention and shall provide such other Party with a copy of relevant portions of the proposed filing prior to such filing (and any revisions to such portions of the proposed filing a reasonable time prior to the filing thereof), including any exhibits thereto relating to the terms and conditions of this Agreement, and shall use reasonable and diligent efforts to obtain confidential treatment of the terms and conditions of this Agreement that such other Party requests be kept confidential, and shall only disclose Confidential Information that is requested by the Securities and Exchange Commission or legally required to be disclosed. No such notice shall be required under this Section 6.4 if the description of or reference to this Agreement contained in the proposed filing has been included in the press release or in any previous filing made by the either Party hereunder or otherwise approved by the other Party.

6.5 Publicity. Except as otherwise provided herein, each Party agrees not to issue any other press release or other public statement disclosing terms of this Agreement or using the name or trademark of the other Party, its Affiliates or its employees, in either case, without the prior written consent of such other Party.

6.6 Existing Confidentiality Agreement. The Parties hereby agree that all confidential information disclosed by one Party to the other pursuant to that certain Confidentiality Agreement, by and between the Parties, dated February 26, 2017, will be governed by the terms of this Agreement.

6.7 Return of Confidential Information. Upon expiry or earlier termination of the Agreement, upon written request of a Party (such request, if made, to be made within three (3) months of such expiry or termination) the other Party will destroy or return (as shall be specified in such request) to the requesting Party all copies of the Confidential Information of the requesting Party; provided that the Party may retain: (i) one copy of such Confidential Information for recordkeeping purposes, for the sole purpose of ensuring compliance with this Agreement; (ii) any copies of such Confidential Information as is required to be retained under Applicable Law; (iii) any copies of such Confidential Information as is necessary or useful for such Party to exercise a right or fulfill an obligation towards a Sublicensee, if any, or as set forth in this Agreement; and (iv) any copies of any computer records and files containing Confidential Information that have been created by such Party's routine archiving/backup procedures.

Article 7 INTELLECTUAL PROPERTY

7.1 Ownership; License Grants.

(a) Exclusive License. CureVac hereby grants to CRISPR, and CRISPR hereby accepts, an exclusive (even as to CureVac and its Affiliates), sublicenseable (in accordance with Section 7.2), worldwide, royalty-bearing license under the Licensed Intellectual Property to Develop, Manufacture, Commercialize and otherwise use, including, but not limited to the right to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export, otherwise exploit and otherwise have exploited, Licensed Products in the Field in the Territory, in accordance with the terms and conditions, and subject to the limitations of this Agreement, the Manufacturing Services Agreement and the Commercial Supply Agreement.

(b) Exclusive Back License. On a Licensed Product-by-Licensed Product basis, as so long as CureVac is supplying Cas9 mRNA Constructs to CRISPR for a Licensed Product under the Manufacturing Services Agreement or any Commercial Supply Agreement, and on a Licensed Product-by-Licensed Product basis, CRISPR hereby grants to CureVac, and CureVac hereby accepts, an exclusive (even as to CRISPR and its Affiliates) worldwide, cost-free sublicense of the rights granted to CRISPR under Section 7.1(a), to Manufacture and have Manufactured Licensed Products in the Field in the Territory. For clarity, CureVac has no license to use, sell or otherwise exploit such Licensed Products and consequently will Manufacture such Licensed Products solely to supply to CRISPR, its Affiliates and their respective Sublicensees under such agreements.

(c) Background Intellectual Property. CureVac acknowledges and agrees that with signing this Agreement it does not acquire a license or any other right to CRISPR Background Intellectual Property except for the limited purpose of carrying out its duties and obligations under this Agreement and that such limited, non-exclusive, cost-free license will expire upon the completion of such duties and obligations or the termination or expiration of this Agreement, whichever is the first to occur. CRISPR acknowledges and agrees that CureVac retains all rights to the CureVac Background Intellectual Property, subject only to the licenses granted hereunder.

(d) Ownership of Foreground Intellectual Property.

(i) Except as set forth in subsection (iii) below, each Party will solely own all right, title and interest in and to all Foreground Intellectual Property that is discovered, created, conceived or reduced to practice solely by or on behalf of such Party ("**Solely-Owned Foreground Know-How**") and all Patent Rights arising therefrom that Cover such Solely-Owned Foreground Know-How ("**Solely-Owned Foreground Patent Rights**"), and together with the Solely-Owned Foreground Know-How, the "**Solely-Owned Foreground Intellectual Property**". All right, title and interest in and to all Solely-Owned Foreground Intellectual Property will automatically vest solely in such Party.

(ii) Except as set forth in subsection (iii) below, the Parties will jointly own all right, title and interest in and to all Foreground Intellectual Property that is discovered, created, conceived or reduced to practice jointly by or on behalf of the Parties (“**Jointly-Owned Foreground Know-How**”) and all Patent Rights arising therefrom that Cover such Jointly-Owned Foreground Know-How (“**Jointly-Owned Foreground Patent Rights**”), and together with the Jointly-Owned Foreground Know-How, the “**Jointly-Owned Foreground Intellectual Property**”. Each Party will have an undivided one-half interest in and to such Jointly-Owned Foreground Intellectual Property. CRISPR will have a right to grant non-exclusive licenses (with the right to grant sublicenses through multiple tiers) to CureVac’s share in such Jointly-Owned Foreground Intellectual Property to the extent such license is required to exercise or exploit CRISPR Background Intellectual Property; and CureVac will have a right to grant non-exclusive licenses (with the right to grant sublicenses through multiple tiers) to CRISPR’s share in such Jointly-Owned Foreground Intellectual Property to the extent such license is required to exercise or exploit CureVac Background Intellectual Property; i.e., neither Party is to be blocked in the use of its Background Intellectual Property. Subject to the licenses granted herein, any further license to Jointly-Owned Foreground Intellectual Property requires the prior written consent of the other Party. Each Party, for itself and on behalf of its and its Affiliates’ employees, subcontractors, consultant and agents, hereby assigns and agrees to assign, without additional consideration, to the other Party a joint and undivided interest in and to all Jointly-Owned Foreground Intellectual Property to effect such joint ownership, which assignment such other Party hereby accepts.

(iii) Notwithstanding subsections (i) and (ii) above,

(A) CRISPR will solely own any Foreground Intellectual Property that is a CRISPR Improvement and that is not also a CureVac Improvement at the time such CRISPR Improvement is discovered, created, conceived, developed or reduced to practice, regardless of the Party or Parties such Foreground Intellectual Property was discovered, created, conceived, developed or reduced to practice by or on behalf of, and CureVac, for itself and on behalf of its and its Affiliates’ employees, subcontractors, consultants and agents hereby assigns and agrees to assign, all of its rights, title and interest in such Intellectual Property to CRISPR. CureVac shall execute and deliver to CRISPR, to the extent necessary, any deed(s) of such assignment, in a mutually agreeable form and will take whatever actions reasonably necessary, including the appointment of CureVac as its attorney in fact solely to make such assignment, to effect such assignment.

(B) CureVac will solely own any Foreground Intellectual Property that is a CureVac Improvement that is not also a CRISPR Improvement at the time such CureVac Improvement is discovered, created, conceived, developed or reduced to practice, regardless of the Party or Parties such Foreground Intellectual Property was discovered, created, conceived, developed or reduced to practice by or on behalf of, and CRISPR, for itself and on behalf of its and its Affiliates’ employees, subcontractors, consultants and agents hereby assigns and agrees to assign, all of its rights, title and interest in such Intellectual Property to CureVac. CRISPR shall execute and deliver to CureVac, to the extent necessary, any deed(s) of such assignment, in a mutually agreeable form and will take whatever actions reasonably necessary, including the appointment of CRISPR as its attorney in fact solely to make such assignment, to effect such assignment.

(C) To the extent a particular item of Foreground Intellectual Property constitutes both a CRISPR Improvement and a CureVac Improvement, (“**Dual Improvement Intellectual Property**”), the Parties shall discuss in good faith whether any such Foreground Intellectual Property can be divided and owned in accordance with subsections (A) and (B) above, made subject to separate patent filings to be assigned accordingly; and to the extent no such division is possible, such Dual Improvement Intellectual Property shall be treated as part of the Jointly-Owned Foreground Intellectual Property for all purposes under this Agreement.

7.2 **Right to Sublicense.** CRISPR shall be entitled to sublicense (through multiple tiers) its rights under Section 7.1(a) to any Affiliates and to any Third Parties, provided that sublicenses to Third Parties require CureVac’s prior written consent which CureVac will not unreasonably withhold, condition or delay and that such sublicenses are subject to the Non-Royalty Sublicense Income in accordance with Section 5.3 above. For any sublicense it must be provided that the respective sublicense agreement contains terms and conditions that are not inconsistent with those contained in this Agreement, and shall include provisions regarding confidentiality, indemnification, audit, record-keeping and termination. CRISPR shall remain liable to CureVac for all obligations under this Agreement. CRISPR shall furnish CureVac with a fully executed copy of any sublicense agreement promptly after its execution, subject to reasonable redactions to the extent not necessary for CureVac to understand the scope of such sublicense, to calculate the Non-Royalty Sublicense Income and to determine if CRISPR is in compliance with this Section 7.2, and subject to the confidentiality provisions therein. The terms of any such sublicense agreement shall be Confidential Information of CRISPR.

7.3 **Disclosure.** Each Party will promptly disclose to the other Party all Foreground Know-How that is discovered, created, conceived or reduced to practice by or on behalf of such Party, and will provide documentation regarding the same as the other Party may reasonably request, including, information obtained by CureVac relating to CureVac’s proprietary mRNA technology platform generally that would reasonably have an impact on any Cas9 mRNA Constructs or Licensed Products.

7.4 **Third Party Licenses.** To the extent CRISPR identifies any Patent Rights controlled by a Third Party that are reasonably necessary for a Party to freely exercise, practice or otherwise use the CureVac Background Patent Rights or the Foreground Patent Rights solely owned by CureVac, in each case, in connection with a Party’s direct or indirect performance of its rights or obligations under this Agreement, and with respect to CRISPR’s exploitation of Cas9 mRNA Constructs included in a Licensed Product in accordance with this Agreement, only if such Cas9 mRNA Constructs are defined by CureVac, CRISPR will promptly notify CureVac of such Patent Rights, Know-How or other intellectual property and CureVac will have the first right to negotiate for and enter into a license agreement (“**Third Party Agreement**”) with respect to such Patent Rights, Know-How, or other intellectual property, provided that CureVac will notify CRISPR if CureVac wishes to exercise such right within [*****] days of CRISPR’s notice, and such first right will continue until the earlier of (x) [*****] days after the date of CureVac’s notice to CRISPR exercising such right or (y) CureVac is no longer actively negotiating such agreement, in which case CureVac will so notify CRISPR (such period is referred to the “**First Exercise Period**”), and CureVac will keep CRISPR reasonably informed as to the status of such negotiations. If CureVac does not notify CRISPR of its intent to exercise such right or the First Exercise Period expires, CRISPR will have the right to negotiate for and enter into a Third Party Agreement with respect to such Patent Rights, Know-How or other intellectual property.

Article 8
PROSECUTION AND ENFORCEMENT

8.1 Patent Prosecution. As between the Parties, each Party will have the sole right, but not the obligation, to file, prosecute and maintain the Patent Rights owned solely by such Party. During the Term, CureVac will consult with CRISPR as to the preparation, filing, prosecution, and maintenance of any of its Foreground Patent Rights reasonably prior to any deadline or action with the United States Patent & Trademark Office or any foreign patent office and will furnish CRISPR with copies of all relevant documents reasonably in advance of consultation. CureVac will reasonably consider any of CRISPR's reasonable comments on any documents to be submitted to such patent offices. In the event CureVac (i) decides not to file a patent application pertaining to any Foreground Know-How in any given country or countries, or (ii) desires to abandon any patent or patent application within the Foreground Patent Rights, then, in each case, CureVac shall provide CRISPR with reasonable prior written notice of such intended decision not to file or such intended decision of abandonment or decline of responsibility. If CRISPR elects to file any such patent application on behalf of CureVac, or if CRISPR elects to continue such patent or patent application on behalf of CureVac, the Parties shall promptly consult and CureVac may elect to retain responsibility therefor provided that any such decision shall be made in a sufficiently prompt time so as not to jeopardize CRISPR's ability to file such patent application or its ability to pursue or maintain such patent or patent application. Otherwise, CRISPR shall have the right, but not the obligation, to prepare, file, prosecute and maintain the relevant Foreground Patent Rights, as applicable, or seek patent protection in the first instance, on behalf of CureVac and at CRISPR's expense.

8.2 Prosecution of Jointly-Owned Foreground Patent Rights. CRISPR will have the first right, but not the obligation to file, prosecute and maintain Jointly-Owned Foreground Patent Rights, and will bear the costs incurred by CRISPR in connection with such efforts. CRISPR will consult with CureVac as to the preparation, filing, prosecution and maintenance of the Jointly-Owned Foreground Patent Rights reasonably prior to any deadline or action with any patent office and will furnish CureVac with copies of all relevant documents reasonably in advance of consultation. CRISPR will reasonably consider any of CureVac's reasonable comments on any documents to be submitted to such patent offices. In the event CRISPR (i) decides not to file a patent application pertaining to any Jointly-Owned Foreground Know-How in any given country or countries, or (ii) desires to abandon any patent or patent application within the Jointly-Owned Foreground Patent Rights, then, in each case, CRISPR shall provide CureVac with reasonable prior written notice of such intended decision not to file or such intended decision of abandonment or decline of responsibility. If CureVac elects to file any such patent application, or if CureVac elects to continue such patent or patent application, the Parties shall promptly consult and CRISPR may elect to retain responsibility therefor provided that any such decision shall be made in a sufficiently prompt time so as not to jeopardize CureVac's ability to file such patent application or its ability to pursue or maintain such patent or patent application. Otherwise, CureVac shall have the right, but not the obligation, to prepare, file, prosecute and maintain the relevant Foreground Patent Rights, as applicable, or seek patent protection in the first instance, at CureVac's expense.

8.3 Cooperation. Each Party will provide the other Party, at the other Party's request and expense, all reasonable assistance and cooperation in connection with this Article 8, including providing any necessary powers of attorney and executing any other required documents or instruments for such filing, prosecution or maintenance, and joining any lawsuit as needed for standing.

8.4 Third Party Actions.

(a) Patent Infringement Claims Against a Party. Each Party shall notify the other if it is aware of any claim that the Development, Manufacture, Commercialization or other use of a Licensed Product in the Field infringes a Patent Right Controlled by a Third Party, setting forth the facts of such claim in reasonable detail. CRISPR shall have the first right, but not the obligation, at its own expense, to defend and control the defense of any such claim, by counsel of its own choice. CRISPR shall not enter into a settlement that imposes a financial obligation upon CureVac or which limits the scope or invalidates any CureVac's intellectual property rights without CureVac's prior written consent and in any settlement CRISPR shall always take into consideration the interest of CureVac. In case CRISPR elects not to defend and control the defense of any such claim, it shall notify CureVac of such election within due term to allow CureVac to defend and control the defense of any such claim.

(b) Notice. If either Party learns of any (i) actual, alleged or threatened infringement or misappropriation of any of the Licensed Patent Rights in the Field, including based on the Development or Commercialization of a product that competes with a Licensed Product; (ii) declaratory judgment initiated by a Third Party naming a Party, or a Party's Affiliate or a Sublicensee as a defendant and alleging invalidity, unenforceability or non-infringement of any of the Licensed Patent Rights Covering the Development or Commercialization of a Licensed Product in the Field ("**Competitive Infringement**"), or (iii) declaratory judgment initiated by a Third Party naming a Party or a Party's Affiliate or Sublicensee as a defendant and alleging invalidity, unenforceability or non-infringement of any Licensed Patent Rights Covering the Manufacture of a Licensed Product in the Field, such Party shall promptly notify the other Party and shall provide the other Party with available evidence of such infringement or declaratory action.

(c) Enforcement and Defense. CRISPR shall have the first and exclusive right, but not the obligation, to take any reasonable measures it deems appropriate with respect to any Competitive Infringement in the Territory of any Licensed Patent Rights. Such measures may include (a) initiating or prosecuting an infringement, misappropriation or other appropriate suit or action (each an "**Infringement Action**") in the Territory, or (b) granting adequate rights and licenses to any Third Party necessary to render continued Competitive Infringement in the Territory non-infringing. Notwithstanding the foregoing, if CRISPR does not inform CureVac that it intends to either initiate such an Infringement Action or grant adequate rights and licenses to such Third Party within [*****] after CRISPR's receipt of a notice of infringement, then CureVac will have the second right, but not the obligation, to initiate such Infringement Action with respect to such Licensed Patent Rights. For any infringement other than a Competitive Infringement, and except as set forth below, each Party will have the first right, but not the obligation to enforce and defend the Licensed Patent Rights owned solely by such Party, and CRISPR will have the first right, but not the obligation to enforce and defend the Jointly Owned Foreground Patent Rights, with the exception only of Jointly-Owned Foreground Patent Rights which solely Cover the Manufacture of the Licensed Products, for which CureVac will have the first right, but not the obligation to enforce and defend. If within [*****] after having been notified of any alleged Third Party infringement of any Licensed Patent Right or any declaratory action contemplated by Section 8.4(d), in each case, in the Field, the Party enforcing or defending the Patent Right is unsuccessful in persuading the alleged infringer to desist, or the respective competent Party shall not have brought an infringement action within such [*****] period, or if the respective competent Party has not responded to such declaratory action, then, in any such event the other Party shall have the right, but not the obligation, to prosecute and defend the respective Licensed Patent Rights in connection with any such matter. The Party taking action to enforce and defend under this Section 8.4(c) shall bear all of its costs related to such enforcement and defense, including any costs incurred by the other Party providing support to such enforcement and defense at the request of the enforcing and defending Party.

(d) Standing to Sue; Collaboration. In any litigation brought by either Party pursuant to this Section 8.4, the enforcing Party shall notify the non-enforcing Party of the commencement of that litigation and shall have the right and standing to use and sue in the other Party's name. Irrespective of which Party brings the infringement action hereunder, (i) the Parties shall collaborate with respect to such action; (ii) the non-enforcing Party shall have the right, at its own expense, to be represented by independent counsel in any such litigation; and (iii) the Parties shall consult with each other regarding and agree on strategic decisions and their implementation in connection with such action. The Party bringing the infringement action hereunder shall bear all the expenses of any suit brought by it claiming infringement of any Licensed Patent Right.

(e) Recovery. In the event that either Party exercises the rights conferred in this Article 8 and recovers any damages or other sums in such action, such damages or other sums recovered shall first be applied to all out-of-pocket costs and expenses incurred by the Parties in connection therewith (including, without limitation, attorneys' fees). If such recovery is insufficient to cover all such costs and expenses of both Parties, the Parties' costs shall be paid on a pro-rated basis. If after such reimbursement any funds shall remain from such damages or other sums recovered, such funds shall be [*****] the Parties

Article 9 INDEMNIFICATION

9.1 Indemnification by CRISPR. Subject to the terms and conditions hereof, CRISPR shall indemnify CureVac, its Affiliates, and its and their directors, officers, employees, approved subcontractors and agents ("**CureVac Indemnitees**") and defend and hold each of them harmless, from and against any and all Third Party claims and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) (collectively, "**Losses**") that such CureVac Indemnitees may be required to pay to one or more Third Parties to the extent arising from or occurring as a result of (a) an uncured material breach of any of CRISPR's representations, warranties or covenants set forth in this Agreement, (b) the exercise by CRISPR and/or any of its Affiliates or Sublicensees of the rights granted to CRISPR pursuant to Sections 4.1 and 7.1 (including the Development, Manufacture, Commercialization or other use of Licensed Products), except to the extent such Losses are in connection with the CureVac Background Intellectual Property or the Foreground Intellectual Property solely owned by CureVac; or (c) the negligence, recklessness, or willful misconduct by CRISPR or its Affiliates. Notwithstanding the foregoing, CRISPR will have no obligations under this Section to the extent Losses arise from or occur as a result of (i) gross negligence or willful misconduct (including noncompliance with any Applicable Laws, regulations, or rules) on the part of a CureVac Indemnitee, or (ii) a breach by CureVac of any representations, warranties or covenants set forth in this Agreement.

9.2 Indemnification by CureVac. Subject to the terms and conditions hereof, CureVac shall indemnify CRISPR, its Affiliates, and its and their directors, officers, employees, subcontractors, and agents ("**CRISPR Indemnitees**"), and defend and hold each of them harmless, from and against any Third Party claims and all Losses that such CRISPR Indemnitees may be required to pay one or more Third Parties to the extent arising from or occurring as a result of (a) an uncured material breach of any of CureVac's representations, warranties or covenants set forth in this Agreement, or (b) the negligence, recklessness, or willful misconduct by CureVac or its Affiliates. Notwithstanding the foregoing, CureVac will have no obligations under this Section to the extent Losses arise from or occur as a result of (i) gross negligence or willful misconduct (including non-compliance with any Applicable Laws, regulations, or rules) on the part of a CRISPR Indemnitee, or (ii) a breach by CRISPR of any representations, warranties or covenants set forth in this Agreement.

9.3 Indemnification Procedures. Except as set forth in Section 8.4(a), the person claiming indemnity under this Article 9 (the “**Indemnified Party**”) shall give written notice to the Party from whom indemnity is being sought (the “**Indemnifying Party**”) promptly after learning of any claim, *provided*, that the failure to provide such notice shall not affect the Indemnifying Party’s obligations hereunder, except to the extent it is materially prejudiced thereby. The Indemnified Party shall provide the Indemnifying Party with reasonable assistance, at the Indemnifying Party’s expense, in connection with the defense of the claim for which indemnity is being sought. The Indemnified Party may participate in and monitor such defense with counsel of its own choosing at its sole expense; *provided, however*, the Indemnifying Party shall have the right to assume and conduct the defense of the claim with counsel of its choice. The Indemnifying Party shall not settle a claim in any manner that would require payment by the Indemnified Party, or would materially adversely affect the rights granted to the Indemnified Party hereunder, or would materially conflict with the terms of this Agreement, or adversely affect such Party or its products, without first obtaining the indemnified Party’s prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. So long as the Indemnifying Party is actively defending the claim in good faith, the Indemnified Party shall not settle or compromise any such claim without the prior written consent of the Indemnifying Party, such consent not to be unreasonably withheld, conditioned or delayed. If the Indemnifying Party does not assume and conduct the defense of the claim as provided above, (a) the Indemnified Party may defend against, consent to the entry of any judgment, or enter into any settlement with respect to such claim in any manner the Indemnified Party may deem reasonable appropriate (and the Indemnified Party need not consult with, or obtain any consent from, the Indemnifying Party in connection therewith), and (b) the Indemnifying Party shall remain responsible to indemnify the Indemnified Party as provided in this Article 9.

Article 10

REPRESENTATIONS AND WARRANTIES

10.1 CureVac Representations. Subject to the disclosures in **Attachment H** hereto, CureVac represents, warrants and covenants to CRISPR, on the Effective Date, as follows.

(a) CureVac is a stock corporation, validly existing and in good standing under the laws of Germany, with full power and authority to operate its properties and to carry on its business as presently conducted.

(b) CureVac has full power and authority to execute, deliver and perform this Agreement. This Agreement constitutes legally binding and valid obligations of CureVac, enforceable in accordance with their terms;

(c) The execution and delivery of this Agreement and the performance of the obligations contemplated hereby have been duly authorized by all appropriate CureVac corporate action;

(d) The execution, delivery and performance by CureVac of this Agreement and the consummation of the transactions contemplated hereby will not result in any violation of, conflict with, result in a breach of or constitute a default under any contract or agreement to which CureVac is a party or by which it is bound.

(e) To the knowledge of CureVac, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of CureVac is required in connection with the execution, delivery and performance of this Agreement.

(f) There is no action, suit, proceeding or investigation pending or, to the knowledge of CureVac, currently threatened in writing against or affecting CureVac that questions the validity of this Agreement or the right of CureVac to enter into this Agreement or perform CureVac's obligations hereunder.

(g) There are no claims, judgments, settlements, litigations, suits, actions, disputes, arbitration, judicial, administrative or legal proceedings pending or, to the knowledge of CureVac, threatened, against CureVac, including with respect to administrative or other governmental investigations, which would (a) be reasonably expected to affect or restrict the ability of CureVac to perform its obligations under this Agreement, or (b) affect in any manner the Licensed Intellectual Property or CureVac's Control thereof.

(h) To the knowledge of CureVac, no Third Party is conducting or engaging in any activity that would constitute infringement or misappropriation of the Licensed Intellectual Property; and to the knowledge of CureVac, the performance of activities contemplated by this Agreement (including the practice of the Licensed Intellectual property in accordance with the terms and conditions of this Agreement) would not itself constitute infringement or misappropriation of Third party's intellectual property rights in existence on the Effective Date.

(i) To CureVac's knowledge, no objection or proceeding is pending or threatened that questions the validity or enforceability of the CureVac Background Intellectual Property or the issuance of any patent applications included therein.

(j) As of and following the Effective Date, CureVac has undertaken reasonable efforts to secure and will continue to use reasonable efforts to secure from all employees, consultants, contractors and other Persons who have contributed or will contribute to the development, creation, conception or invention of any of the Licensed Intellectual Property a written agreement assigning to CureVac or its Affiliates all rights to such developments, creations, conceptions or inventions and such Affiliates have assigned such rights to CureVac, and, to CureVac's knowledge, neither CureVac nor any of its Affiliates has received any written communication challenging CureVac's ownership or right to such Licensed Intellectual Property, unless such an agreement with the inventor is not required under Applicable Law for ownership in such Licensed Intellectual Property to vest in CureVac.

10.2 CRISPR's Representations. CRISPR represents and warrants to CureVac, on and as of the Effective Date, that:

(a) CRISPR is a corporation, duly incorporated, validly existing and in good standing under the laws of Switzerland, with full corporate power and authority to operate its properties and to carry on its business as presently conducted;

(b) CRISPR has full power and authority to execute, deliver and perform this Agreement. This Agreement constitutes the legally binding and valid obligations of CRISPR, enforceable in accordance with their terms;

(c) the execution, delivery and performance by CRISPR of this Agreement and the consummation of the transactions contemplated thereby will not result in any violation of, conflict with, result in a breach of or constitute a default under any contract or agreement to which CRISPR is a party or by which it is bound, its business or assets;

(d) no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of CRISPR is required in connection with the execution, delivery and performance of this Agreement; and

(e) there is no action, suit, proceeding or investigation pending or, to the knowledge of CRISPR, currently threatened against or affecting CRISPR or that questions the validity of this Agreement, or the right of CRISPR to enter into this Agreement or consummate the transactions contemplated hereby.

10.3 **Covenants.** Each Party covenants and agrees that during the Term, neither it, nor its Affiliates, will take any action or cause or permit the taking of any action that would have the effect of invalidating or breaching any of the representations or warranties contained in [Section 10.1](#) or [10.2](#), including, without limitation, any action that would result in any invalidity of any of the Licensed Patent Rights. Without limiting the foregoing, CureVac covenants and agrees that during the Term, neither it, nor its Affiliates, will take any action or cause or permit the taking of any action that would materially adversely affect the rights of CRISPR under this Agreement. For clarity, CureVac cannot and will not grant a license to any Third Party to the extent CRISPR has obtained exclusive rights under this Agreement.

10.4 **Disclaimer of Warranties.** EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY OTHER WARRANTIES CONCERNING PATENT RIGHTS OR ANY OTHER MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS, OR ARISING OUT OF COURSE OF CONDUCT OR TRADE CUSTOM OR USAGE, AND EACH PARTY DISCLAIMS ALL SUCH EXPRESS OR IMPLIED WARRANTIES.

Article 11 INSURANCE; LIMITATION OF LIABILITY

11.1 **Insurance.** CRISPR shall maintain, at its own cost, a program of insurance and/or self-insurance against liability (including product liability) and any other risks associated with its activities and obligations under this Agreement, the Commercialization of any Licensed Products, and its indemnification obligations hereunder, in such amounts, subject to such deductibles and on such terms as are customary for companies similar to CRISPR for the activities to be conducted by them under this Agreement. Such insurance coverage shall be kept as long as any Licensed Product is Commercialized. CureVac shall maintain, at its own cost, a program of insurance and/or self-insurance against liability and any other risks associated with its activities and obligations under this Agreement, and its indemnification obligations hereunder, in such amounts, subject to such deductibles and on such terms as are customary for companies similar to CureVac for the activities to be conducted by CureVac under this Agreement. Such insurance coverage shall be kept as long as any Licensed Product is commercialized.

11.2 Consequential Damages. EXCEPT WITH RESPECT TO WILLFUL MISCONDUCT, GROSS NEGLIGENCE, ANY BREACH OF ARTICLE 6 (CONFIDENTIALITY), OR ANY INDEMNIFICATION OBLIGATIONS UNDER ARTICLE 9, TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAWS, IN NO EVENT WILL EITHER PARTY OR ITS AFFILIATES OR ITS OR THEIR OFFICERS, DIRECTORS, EMPLOYEES OR AGENTS BE LIABLE TO THE OTHER PARTY OR ITS AFFILIATES FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS) ARISING FROM OR RELATED TO THIS AGREEMENT.

Article 12
GENERAL COMPLIANCE WITH LAW

Each Party will use reasonable commercial efforts to comply with all Applicable Law relating to the exercise of rights and satisfaction of obligations under this Agreement.

Article 13
TERM AND TERMINATION

13.1 Term. The Term will commence as of the Effective Date, and unless earlier terminated in accordance with this Section 13, will expire on a Licensed Product-by-Licensed Product and country-by-country basis, upon such time as the Royalty Term with respect to the sale of such Licensed Product in such country expires.

13.2 Termination for Breach.

(a) Material Breach. Subject to the other terms of this Agreement, this Agreement may be terminated, on a Program-by-Program basis, by either Party for a material breach by the other Party to this Agreement, *provided* that the breaching Party has not cured such breach within [*****] after the date of written notice to the breaching Party, which notice shall describe such breach in reasonable detail and shall state the non-breaching Party's intention to terminate this Agreement pursuant to this Section, provided further that in no event will the failure of CRISPR to pay a disputed amount under this Agreement, the Manufacturing Services Agreement or any Commercial Supply Agreement be considered a material breach of this Agreement.

(b) Program by Program; Development Program. In the event the facts giving rise to termination under Section 13.2(a) relate to one or more Programs but not all Programs, such termination, if any, will relate only to the affected Program(s) and this Agreement will otherwise continue with respect to all other Programs in all respects. Further, if CRISPR exercises any of its termination rights under this Article 13, CRISPR may terminate the Development Program without terminating the remainder of this Agreement.

13.3 Voluntary Termination by CRISPR. CRISPR may terminate this Agreement, in its entirety or on a Program-by-Program basis, at any time upon [*****] prior written notice to CureVac.

13.4 Termination for Bankruptcy. If any Party hereto files for protection under bankruptcy laws, makes an assignment for the benefit of creditors, appoints or suffers appointment of a receiver or trustee over its property, files a petition under any bankruptcy or insolvency act or has any such petition filed against it which is not discharged within [*****] of the filing thereof, then the respective other Party may terminate this Agreement effective immediately upon written notice to the insolvent Party.

13.5 Change of Control of CRISPR. In the event of (i) a direct or indirect acquisition of beneficial ownership of fifty percent (50%) or more of the voting power in CRISPR by a CureVac Competitor; or (ii) the sale or other disposition of all or substantially all of the assets of CRISPR to a CureVac Competitor; or (iii) the merger, amalgamation or other form of business combination or similar transaction between CRISPR and a CureVac Competitor (“**Change of Control**”) the following shall apply:

(a) CRISPR shall promptly give written notice of such Change of Control to CureVac; and

(b) CureVac shall have the right to be released of any or all of its ongoing obligations under the Development Program, and of its obligations of disclosure and information exchange relating solely thereto. In addition, the JSC shall be dissolved upon CureVac’s request. For clarity, CureVac shall not have the right to be released from any obligations under this Agreement, the Manufacturing Services Agreement, or the Commercial Supply Agreement relating to the Programs or Licensed Products outside of the Development Program. For further clarity, CRISPR shall retain all rights hereunder to all Cas9 mRNA Constructs and any other deliverables delivered to CRISPR under the Development Program prior to such Change of Control, and CRISPR shall have the right to exploit such Cas9 mRNA Constructs and any other deliverables in accordance with the license grant set forth in Section 7.1.

(c) In addition to the confidentiality obligations according to Article 6, CRISPR shall take reasonable steps to ensure that any Confidential Information of CureVac provided under this Agreement is not shared with any others within CRISPR that are not required to manage, perform and exercise CRISPR’s rights and obligations under this Agreement.

13.6 Termination for Challenge of CureVac Licensed Patent Rights. CureVac may terminate this Agreement by providing [*****] prior written notice to CRISPR in the event CRISPR or any of its Affiliates directly or indirectly challenges the validity of the Licensed Patent Rights in a legal proceeding or supports a Third Party in the challenge of a Licensed Patent Right in a legal proceeding (in each case before a court of competent jurisdiction). Any such termination shall only become effective if CRISPR or its Affiliate has not withdrawn such action before the end of the above notice period. In the event a Sublicensee of CRISPR challenges the validity of a CureVac Licensed Patent Right, CureVac may terminate this Agreement hereunder, if CRISPR does not terminate such sublicense agreement within the [*****] notice period.

13.7 Remedies. Except as otherwise expressly set forth in this Agreement, the termination provisions of this Article 13 are in addition to any other relief and remedies available to either Party under this Agreement and at law.

13.8 Effects of Expiration or Termination.

(a) License Upon Expiration. Upon expiration, but not upon earlier termination of this Agreement, the licenses granted to CRISPR in Section 7.1 shall automatically convert to the license set forth in Section 5.5(e).

(b) Termination of Licenses. Upon any termination of this Agreement by a Party prior to expiration, except as otherwise provided in Section 13.5, as of the effective date of such termination, all licenses granted by CureVac to CRISPR under this Agreement shall terminate automatically, and the Licensed Intellectual Property shall automatically revert back to CureVac.

(c) Notwithstanding the foregoing, no termination of this Agreement shall be construed as a termination of any sublicense of any Sublicensee hereunder, and thereafter each such Sublicensee shall be considered a direct licensee of CureVac, provided (i) CureVac has approved such sublicense in accordance with Section 7.2; (ii) CureVac does not assume undertakings and liabilities towards the Sublicensee beyond those stipulated herein; and (iii) the Sublicensee is then in full compliance with all terms and conditions of its sublicense.

(d) Post-Termination Activities. Upon termination of this Agreement CRISPR shall provide CureVac with a written inventory of all Licensed Products that are in the process of Manufacture, in use or in stock; *provided, however*, that if CRISPR terminates this Agreement in part under Section 13.3, such inventory shall only apply to the Licensed Products subject to such partial termination. All Licensed Products that are not disposed of as provided above shall be delivered to CureVac or otherwise disposed of in CureVac's sole discretion and at CRISPR's sole expense.

(e) Accrued Payment Claims. Termination of this Agreement for any reason whatsoever shall not relieve CRISPR of its obligations to pay all royalties, milestones and other amounts payable to CureVac which have accrued prior to, but remain unpaid as of, the date of expiration or termination hereof.

(f) Reversion. In the event of termination of this Agreement by CRISPR pursuant to Section 13.3 or by CureVac pursuant to Section 13.2 or 13.4, CureVac shall be entitled to demand from CRISPR the transfer and/or assignment, as applicable, of all right, title and interest in and to any Cas9 mRNA Constructs, and all data related thereto. Under no circumstance shall CureVac be entitled to any CRISPR Background Intellectual Property, CRISPR Improvement, CRISPR's Solely-Owned Foreground Intellectual Property, CRISPR's interest in and to any Jointly-Owned Foreground Intellectual Property, or to any CRISPR Drug Product (as defined in the Manufacturing Services Agreement) or any data related to or generated through the use of or reference to a CRISPR Drug Product.

13.9 Surviving Provisions. Notwithstanding any provision herein to the contrary, the rights and obligations of the Parties set forth in Article 6 (Confidentiality), Article 7 (Intellectual Property) (provided that Sections 7.1(a), 7.1(c), 7.2, and 7.3 shall not survive termination by CRISPR under Section 13.3 (Voluntary Termination by CRISPR) or any termination by CureVac under Article 13), Article 8 (with respect to Patent Rights Covering Know-How developed prior to Termination), Article 9 (Indemnification), Section 11 (Insurance, Limitation of Liability), Section 13.7 (Remedies), Section 13.8 (Effects of Expiration or Termination), Section 13.9 (Surviving Provisions), Article 14 (Dispute Resolution) and Article 15 (Miscellaneous, to the extent applicable), as well as any rights or obligations otherwise accrued hereunder (including any accrued payment obligations), shall survive the expiration or termination of this Agreement. Termination shall not relieve any Party from any liability which has accrued prior to such termination.

Article 14
DISPUTE RESOLUTION

14.1 Mandatory Procedures. The Parties agree that any dispute arising out of or relating to this Agreement will be resolved solely by means of the procedures set forth in this Article 14, and that such procedures constitute legally binding obligations that are an essential provision of this Agreement. If either Party fails to observe the procedures of this Article 14, as may be modified by their written agreement, the other Party may bring an action for specific performance of these procedures in any court of competent jurisdiction.

14.2 Dispute Resolution Procedures. In the event of a dispute between the Parties (other than disputes arising out of the JSC), relating to the validity performance, construction or interpretation of this Agreement, upon the request of either Party by written notice, the Parties agree to meet and discuss in good faith a possible resolution thereof, which good faith efforts shall include at least one in-person meeting between the Executive Officers of each Party. If the matter is not resolved within [*****] following the written request for discussions, either Party may then invoke the provisions of Section 14.3.

14.3 Any dispute (other than disputes arising from the JSC) relating to the validity performance, construction or interpretation of this Agreement, which cannot be resolved amicably between the Parties after following the procedure set forth in Section 14.2, shall be submitted to arbitration in accordance with the Arbitration Rules of WIPO in effect on the date of the commencement of the arbitration proceedings. The location of the arbitration proceedings will be London, England. The number of arbitrators will be three (3). The language of the arbitration proceeding will be English. The decision of the arbitrators shall be final and binding upon the Parties (absent manifest error on the part of the arbitrator(s)) and enforceable in any court of competent jurisdiction.

14.4 Performance to Continue. Each Party will continue to perform its undisputed obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement; *provided, however*, that a Party may suspend performance of its undisputed obligations during any period in which the other Party fails or refuses to perform its undisputed obligations.

14.5 Tolling. The Parties agree that all applicable statutes of limitation and time-based defenses, as well as all time periods in which a Party must exercise rights or perform obligation hereunder, will be tolled once the dispute resolution procedures set forth in this Section 14.5 have been initiated and for so long as they are pending, and the Parties will cooperate in taking all actions reasonably necessary to achieve such a result. In addition, during the pendency of any dispute under this Agreement initiated before the end of any applicable cure period, (a) this Agreement will remain in full force and effect, (b) the provisions of this Agreement relating to termination for material breach with respect to such dispute will not be effective, (c) the time period for cure as to any termination notice given prior to the initiation of arbitration will be tolled, (d) any time periods to exercise rights or perform obligations will be tolled; and (e) neither Party will issue a notice of termination pursuant to this Agreement based on the subject matter of the arbitration, until the arbitral tribunal has confirmed the material breach and the existence of the facts claimed by a Party to be the basis for the asserted material breach; *provided*, that if such breach can be cured by (i) the payment of money, the defaulting Party will have an additional [*****] within its receipt of the arbitral tribunal's decision to pay such amount or (ii) the taking of specific remedial actions, the defaulting Party will have a reasonably necessary period to diligently undertake and complete such remedial actions within such reasonably necessary period or any specific timeframe established by such arbitral tribunal's decision before any such notice of termination can be issued. Further, with respect to any time periods that have run during the pendency of the dispute, the applicable Party will have a reasonable period of time or any specific timeframe established by such arbitral tribunal's decision to exercise any rights or perform any obligations affected by the running of such time periods.

Article 15
MISCELLANEOUS

15.1 Severability. If any one or more of the provisions of this Agreement is held to be invalid or unenforceable, the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof, unless the invalid or unenforceable provision is of such essential importance to this Agreement that it is to be reasonably assumed that the Parties would not have entered into this Agreement without the invalid or unenforceable provision. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

15.2 Notices. Any notice required or permitted to be given by this Agreement shall be in writing and shall be (a) delivered by hand or by FedEx, UPS or any other similar service with tracking capabilities, (b) registered mail, or (c) delivered by facsimile followed by delivery via any of the methods set forth in this Section 15.2, in each case, addressed as set forth below unless changed by notice so given:

If to CRISPR:

CRISPR Therapeutics AG
Baarerstrasse 14
6300 Zug
Switzerland
Attention: Chief Executive Officer

and

CRISPR Therapeutics Limited
85 Tottenham Court Road
London W1T 4TQ
United Kingdom
Attention: Chief Legal Officer

with copies (which shall not constitute notice) to:

Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attention: [*****]
Facsimile: [*****]
Telephone: [*****]

and

[*****]

If to CureVac:

CureVac AG
Paul-Ehrlich-Str. 15
72076 Tübingen
Germany
Attention: CEO and General Counsel

Any such notice shall be deemed given on the date received. A Party may add, delete, or change the person or address to which notices should be sent at any time upon written notice delivered to the Party's notices in accordance with this [Section 15.2](#).

15.3 **Assignment**. Neither Party may, without the consent of the other Party, such consent not to be unreasonably withheld, conditioned or delayed, assign or transfer any of its rights and obligations hereunder; *provided* that no such consent is required for an assignment or transfer (in whole or in part) by either Party (a) to an Affiliate or (b) to a successor-in-interest by reason of merger or consolidation or sale of all or substantially all of the respective Party's assets to which this Agreement relates; *provided further* that, with respect to an assignment or transfer by a Party in accordance with the prior provisions, (i) with respect to an assignment to a successor-in-interest, such assignment includes all relevant rights and obligations under this Agreement, and (ii) any assignee or transferee shall have agreed as of such assignment or transfer to be bound by the terms of this Agreement in a writing provided to the other Party. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding on the Parties' successors and permitted assigns. Any assignment or transfer in violation of the foregoing shall be null and void and wholly invalid, the assignee or transferee in any such assignment or transfer shall acquire no rights whatsoever, and the non-assigning, non-transferring Party shall not recognize, nor shall it be required to recognize, such assignment or transfer. Upon request by CRISPR, the Parties shall cooperate to enter into a separate agreement or agreements with respect to one or more Programs covered under this Agreement (i.e. severing such Program(s) from this Agreement and covering them instead in a separate agreement having the same terms as this one but being limited to such Program or Programs), which separate agreement(s) may be assigned in accordance with the foregoing provisions of this [Section 15.3](#).

15.4 **Waivers and Modifications**. The failure of any Party to insist on the performance of any obligation hereunder shall not be deemed to be a waiver of such obligation. Waiver of any breach of any provision hereof shall not be deemed to be a waiver of any other breach of such provision or any other provision on such occasion or any succeeding occasion. No, modification, release, or amendment of any obligation under or provision of this Agreement shall be valid or effective unless in writing and signed by both Parties.

15.5 **Governing Law**. This Agreement shall be governed by and construed and interpreted in accordance with the laws of Switzerland; irrespective of the choice of laws principles of the laws of Switzerland, as to all matters, including matters of validity, construction, effect, enforceability, performance and remedies, provided, that questions affecting the construction and effect of any Patent Rights shall be determined by the law of the country in which the Patent Rights have been filed, granted or issued.

15.6 Relationship of the Parties. Each Party is an independent contractor under this Agreement. Nothing contained herein is intended or is to be construed so as to constitute CureVac and CRISPR as partners, agents, or joint venturers. Neither Party shall have any express or implied right or authority to assume or create any obligations on behalf of or in the name of the other Party or to bind the other Party to any contract, agreement, or undertaking with any Third Party. There are no express or implied third party beneficiaries hereunder.

15.7 Entire Agreement. This Agreement and the attached attachments constitutes the entire agreement between the Parties as to the subject matter of this Agreement and, as of the Effective Date, supersedes and merges all prior and contemporaneous negotiations, representations, agreements, and understandings regarding the same. The Material Transfer Agreement between the Parties dated June 13, 2016, as amended from time to time, and the Confidentiality Agreement between the Parties dated February 26, 2016 are being replaced as of the Effective Date, provided that the ownership rights with respect to any Intellectual Property (as defined in the Material Transfer Agreement) discovered, created, conceived or reduced to practice under the Material Transfer Agreement prior to the Effective Date will remain to be governed by the Material Transfer Agreement. This Agreement, and its attachments, may not be amended except in a writing signed by duly authorized representatives of the Parties expressly stating that it is amending this Agreement and identifying each provision being amended.

15.8 Counterparts. This Agreement may be executed in counterparts (whether delivered by facsimile or otherwise) with the same effect as if both Parties had signed the same document. All such counterparts shall be deemed an original, shall be construed together and shall constitute one and the same instrument.

15.9 Interpretation.

(a) Each of the Parties acknowledges and agrees that this Agreement has been diligently reviewed by and negotiated by and between them, that in such negotiations each of them has been represented by competent counsel, and that the final agreement contained herein, including the language whereby it has been expressed, represents the joint efforts of the Parties and their counsel. Accordingly, in interpreting this Agreement or any provision hereof, no presumption shall apply against any Party as being responsible for the wording or drafting of this Agreement or any such provision, and ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision.

(b) The definitions of the terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine, and neuter forms. The word “will” shall be construed to have the same meaning and effect as the word “shall.” The word “any” shall mean “any and all” unless otherwise clearly indicated by context. The word “including” will be construed as “including without limitation.” The word “or” will be interpreted in the inclusive sense commonly associated with the term “and/or”.

(c) Unless the context requires otherwise, (a) any definition of or reference to any agreement, instrument, or other document herein shall be construed as referring to such agreement, instrument, or other document as from time to time amended, supplemented, or otherwise modified (subject to any restrictions on such amendments, supplements, or modifications set forth herein or therein), (b) any reference to any Applicable Laws herein shall be construed as referring to such Applicable Laws as from time to time enacted, repealed, or amended, (c) any reference herein to any Person shall be construed to include the Person's successors and assigns, (d) all references herein to Articles, Sections, or Attachments, unless otherwise specifically provided, shall be construed to refer to Articles, Sections, and Attachments of this Agreement, and references to this Agreement includes all Articles, Sections, and Attachments hereof, (e) the words "herein", "hereof" and "hereunder", and words of similar import, will be construed to refer to this Agreement in each of their entirety, as the context requires, and not to any particular provision hereof, (f) the word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under this Agreement, and (g) provisions that require that a Party, the Parties or any committee hereunder "agree," "consent" or "approve" or the like will require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise (but excluding e-mail and instant messaging).

(d) Headings and captions are for convenience only and are not be used in the interpretation of this Agreement.

15.10 Section 365(n).

(a) All licenses granted under this Agreement are deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of right to "intellectual property" as defined in Section 101 of such Code. Each Party, as licensee, may fully exercise all of its rights and elections under the U.S. Bankruptcy Code and any foreign equivalent thereto in any country having jurisdiction over a Party or its assets. The Parties further agree that, if a Party elects to retain its rights as a licensee under such Code, such Party shall be entitled to complete access to any technology licensed to it hereunder and all embodiments of such technology. Such embodiments of the technology shall be delivered to the licensee Party not later than:

(i) the commencement of bankruptcy proceedings against the licensor, upon written request, unless the licensor elects to perform its obligations under the Agreement, or

(ii) if not delivered under Section 15.10(a)(i), upon the rejection of this Agreement by or on behalf of the licensor, upon written request.

(b) Any agreements supplemental hereto will be deemed to be "agreements supplementary to" this Agreement for purposes of Section 365(n) of the Bankruptcy Code.

[Signature page follows.]

CONFIDENTIAL

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of the Effective Date.

CureVac AG

By: /s/ Dr. Ingmar Hoerr

Name: Dr. Ingmar Hoerr

Title: Chief Executive Officer

CRISPR Therapeutics AG

By: _____

Name: _____

Title: _____

CONFIDENTIAL

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of the Effective Date.

CureVac AG

By: _____
Name: _____
Title: _____

CRISPR Therapeutics AG

By: /s/ Rodger Novak
Name: Rodger Novak
Title: Chief Executive Officer

EXECUTION COPY

CONFIDENTIAL

ATTACHMENT A

CRISPR Background Intellectual Property.

A. [*****]

ATTACHMENT B

CureVac Background Intellectual Property

[*****]

ATTACHMENT C

Materials

Cas9 mRNA Constructs developed under this Agreement

ATTACHMENT D
Work Plan

[*****]

ATTACHMENT E

Manufacturing Services Agreement

[*****]

ATTACHMENT F

JSC Participants

[*****]

ATTACHMENT G

Alternative Program 1 Target List

[*****]

ATTACHMENT H

Disclosure Letter

[*****]

REDACTED

Certain identified information, indicated by [*****], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

EXCLUSIVE COLLABORATION AND LICENSE AGREEMENT

- by and between -

CUREVAC GMBH

- and -

BOEHRINGER INGELHEIM INTERNATIONAL GMBH

AUGUST 21, 2014

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Exhibit 6.1	Clinical Supply Agreement
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EXCLUSIVE COLLABORATION AND LICENSE AGREEMENT

This Exclusive Collaboration and License Agreement ("**Agreement**") is entered into on August 21, 2014 ("**Effective Date**"),

BY AND BETWEEN

CureVac GmbH, a German limited liability company with offices at Paul-Ehrlich-Str. 15, 72076 Tubingen, Germany ("**CureVac**");

AND

Boehringer Ingelheim International GmbH, a German limited liability company with offices at Binger StraBe 173, 55216 Ingelheim am Rhein, Germany ("**BI**").

RECITALS

WHEREAS, CureVac is a biotechnology company that is a pioneer and technology leader in mRNA-based vaccination approaches and especially discovers, designs and develops first-in-class mRNA vaccines and immune-therapies for the treatment of oncological diseases with unmet medical need;

WHEREAS, BI is a research based pharmaceutical company which possesses expertise relating to the research, development, manufacture, marketing and sale of pharmaceutical products, and BI aims to enter into the immunotherapeutic treatment of oncological diseases;

WHEREAS, CureVac wishes to grant an exclusive license and an exclusive option to BI, and BI wishes to take, an exclusive license and an exclusive option under such intellectual property rights; and

WHEREAS, the Parties wish (i) to mutually collaborate to Develop and Manufacture (each as defined below) the Licensed Vaccines and Licensed Products (as defined below) in the Territory (as defined below), and (ii) for BI to Commercialize (as defined below) the Licensed Vaccines and Licensed Products in the Territory, in each case in accordance with the terms and conditions set forth below.

NOW, THEREFORE, the Parties hereby agree as follows:

1. DEFINITIONS.

For purposes of this Agreement, the following capitalized terms shall have the following meanings, whether used in the singular or plural:

- 1.1** "**Affiliate**" shall mean and include with respect to any Party, (i) any legal entity of which the securities or other ownership interests representing fifty percent (50%) or more of the equity or fifty percent (50%) or more of the ordinary voting power or fifty percent (50%) or more of the general partnership interest are, at the time such determination is being made, owned, controlled or held, directly or indirectly, by such Party, or (ii) any legal entity which, at the time such determination is being made, is controlling or under common control with, such Party, *provided, however*, that regarding CureVac, Affiliate shall not include Mr. Dietmar Hopp and dievini Hopp BioTech holding GmbH & Co. KG and/or any other companies controlled by Mr. Dietmar Hopp and/or dievini Hopp BioTech holding GmbH & Co. KG. As used in this definition, the term "**control**", whether used as a noun or verb, refers to the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of a legal entity, whether through the ownership of voting securities, by contract or otherwise.

- 1.2** "Applicable Laws" shall mean all applicable provisions of all statutes, laws, rules, regulations, administrative codes, ordinances, decrees, orders, decisions, guidance documents, injunctions, awards, judgments, and permits as well as licenses of or from Regulatory Authorities relating to the development, use, manufacture, marketing or regulation of the subject item.
- 1.3** "BI Background Intellectual Property" shall mean Intellectual Property Controlled by BI or its Affiliates on the Effective Date and which is necessary or useful for the Manufacture, Development and Commercialization of the Licensed Vaccines and/or a Licensed Product (including an Afatinib Vaccine) in accordance with this Agreement, but excluding Intellectual Property related to the manufacture of plasmid DNA. The BI Background Intellectual Property includes the Intellectual Property listed in **Exhibit 1.3** hereto.
- 1.4** "BI Collaboration Intellectual Property" shall mean the Collaboration Intellectual Property Controlled by BI including BI's share in jointly owned Collaboration Intellectual Property.
- 1.5** "BI Intellectual Property" shall mean
- (a) BI Background Intellectual Property; **and**
 - (b) BI Collaboration Intellectual Property.
- 1.6** "Biosimilar Product" shall mean a biological medicinal product that is equivalent to a biological medicinal product that has previously obtained regulatory approval and which has an active substance that is equivalent to the active substance of the biological reference medicinal product.
- 1.7** "Calendar Quarter(ly)" shall mean the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 or December 31, for so long as this Agreement is in effect.
- 1.8** "Clinical Trials" shall mean all clinical trials to be conducted with respect to the Development of the Licensed Vaccines, including Phase I Clinical Trials, Phase II Clinical Trials and Phase III Clinical Trials.

- 1.9** "**CMC Development**" shall mean all research and development activities conducted in respect of the Manufacture of the Licensed Vaccines, including chemistry, manufacturing and control (CMC), test method development and stability testing, process development, manufacturing scale-up, qualification and validation, and any other activity necessary or reasonably useful or otherwise requested or required by a Regulatory Authority as a condition or in support of obtaining or maintaining Regulatory Approvals to successfully Manufacture the Licensed Vaccines for use in the Field.
- 1.10** "**Collaboration Intellectual Property**" shall mean any Intellectual Property generated by or on behalf of either Party under this Agreement with the exception of Intellectual Property related to the BI pDNA Process and generated under a Related Agreement specific to such BI pDNA Process.
- 1.11** "**Combination Product**" shall mean a pharmaceutical formulation containing as its active ingredients both a Licensed Vaccine and one or more other therapeutically active ingredients, that is packaged and labeled for sale in the Territory.
- 1.12** "**Commercialization**" shall mean any and all activities directed to the preparation for sale of, offering for sale of, or sale of a Licensed Product, including activities related to marketing, promoting, labelling, packaging, distributing, importing and exporting such Licensed Products, and interacting with Regulatory Authorities regarding any of the foregoing. For the avoidance of doubt, "Commercialization" shall not include the Manufacture of Licensed Vaccines. When used as a verb, to "**Commercialize**" and "**Commercializing**" shall mean to engage in Commercialization, and "**Commercialized**" has a correlative meaning.
- 1.13** "**Commercially Reasonable Efforts**" shall mean, with respect to the efforts to be expended by a Party with respect to any objective, the reasonable, diligent, good faith efforts to accomplish such objective as such Party would normally use to accomplish a similar objective under similar circumstances. It is understood and agreed that with respect to the Development and Commercialization of Licensed Vaccines and Licensed Products by BI, such efforts shall be substantially equivalent to those efforts and resources commonly used by BI for pharmaceutical development candidates or products owned by it or to which it has rights, which development candidate or product is at a similar stage in its Development or product life and is of similar market potential taking into account all scientific, commercial and other factors that BI would take into account, including efficacy, safety, expected and actual cost and time to Develop, expected and actual profitability, approved labelling, the competitiveness of alternative products in the marketplace, the expected and actual market exclusivity (including patent and other proprietary position and regulatory exclusivity) of the Licensed Vaccines and Licensed Products, the expected and actual amounts of marketing and promotional expenditures and the likelihood of receipt of a Regulatory Approval given the Regulatory Authority involved.

- 1.14** "**Confidential Information**" shall mean and include all Know How including Know How comprised in the CureVac Licensed Intellectual Property, and Know How comprised in the BI Intellectual Property, and all other proprietary information, Development Data and Materials, not in the public domain, relating to the Licensed Vaccines and Licensed Products, Afatinib, the Field, the indications, or the business, affairs, research and development activities, results of pre-clinical and clinical trials, national and multinational regulatory proceedings and affairs, finances, plans, contractual relationships and operations of the Parties. The terms and conditions of this Agreement shall be considered Confidential Information of both Parties.
- 1.15** "**Co-Packaged Product**" shall mean a single packaged product containing a Licensed Vaccine and one or more other therapeutically or prophylactically active products (including [****]) as separate components in a co-packaged form, that is packaged and labeled for sale in the Territory.
- 1.16** "**Control**" or "**Controlled**" shall mean with respect to the subject item or right, the ability (whether by ownership or license, other than pursuant to this Agreement) by a Party to grant to the other Party access or a license as provided herein under such item or right without violating the terms of any agreement or other arrangement with any Third Party.
- 1.17** "**CureVac Background Intellectual Property**" shall mean Intellectual Property Controlled by CureVac or its Affiliates on the Effective Date and which is necessary or useful for the Non-clinical and Clinical Development and Commercialization of the Licensed Vaccines and Licensed Products in accordance with this Agreement. The CureVac Background Intellectual Property includes the Intellectual Property listed in **Exhibit 1.17** hereto. CureVac Background Intellectual Property includes the CV9202 Specific Patent Rights until such CV9202 Specific Patent Rights are assigned and transferred to BI in accordance with Section 9.4 below. CureVac Background Intellectual Property will also include the antigen specific Intellectual Property, if any, to be licensed upon exercise of the Option in accordance with Section 3.3 below.
- 1.18** "**CureVac Collaboration Intellectual Property**" shall mean the Collaboration Intellectual Property Controlled by CureVac or its Affiliates including CureVac's share in jointly owned Collaboration Intellectual Property and where such Collaboration Intellectual Property is necessary or useful for the Non-clinical and Clinical Development and Commercialization of the Licensed Vaccines and Licensed Products in accordance with this Agreement.
- 1.19** "**CureVac Licensed Intellectual Property**" shall mean
- (a) CureVac Background Intellectual Property; **and**
 - (b) CureVac Collaboration Intellectual Property.
- 1.20** "**CureVac Licensed Patent Rights**" shall mean the Patent Rights which form part of the CureVac Licensed Intellectual Property.
- 1.21** "**CureVac Licensed Manufacturing Intellectual Property**" shall mean the Intellectual Property including the Collaboration Intellectual Property including CureVac's share in jointly owned Collaboration Intellectual Property, in each case as Controlled by CureVac or its Affiliates on the date when BI takes over the CMC Development and Manufacturing of the Licensed Vaccines in accordance with Sections 6.3 or 6.5 below, if ever, and where such Intellectual Property is necessary or useful for the CMC Development and/or Manufacturing of the Licensed Vaccines and Licensed Products in accordance with this Agreement. The CureVac Licensed Manufacturing Intellectual Property as of the date when BI takes over the CMC Development and Manufacture will be listed at the respective time.

- 1.22 "CV9202" shall mean CureVac's clinical product candidate which consists [*****].
- 1.23 "CV9202 Specific Patent Rights" shall mean the Patent Rights listed in **Exhibit 1.23** hereto which will be assigned and transferred to BI under the conditions set forth in Section 9.4 below.
- 1.24 "**Development**" shall mean all research, non-clinical, and clinical testing and drug development activities conducted in respect of the Licensed Vaccines and Licensed Products, including those necessary or reasonably useful or otherwise requested or required by a Regulatory Authority as a condition or in support of obtaining or maintaining Regulatory Approvals and to successfully Develop, Manufacture and Commercialize the Licensed Vaccines and Licensed Products for use in the Field. "Development" shall include chemistry, Manufacturing and control (CMC), test method development and stability testing, formulation development, delivery system development, non-clinical testing, mechanism studies, toxicology, pharmacokinetics, clinical studies, process development, manufacturing scale-up, qualification and validation, quality assurance/quality control, regulatory affairs activities, statistical analysis and report writing, submission of documents, market research, pharmaco-economic studies, and epidemiological/real world data studies. Development shall mean both (a) Non-clinical and Clinical Development; and (b) CMC Development. "**Develop**" and "**Developed**" have a correlative meaning.
- 1.25 "**Development Data**" shall mean (i) reports of non-clinical studies and Clinical Trials, (ii) CMC Development data; and (iii) all other documentation containing or embodying any non-clinical or clinical data relating to the Licensed Vaccines and Licensed Products or the use of the Licensed Vaccines and Licensed Products in the Field, such data in each case (i) and (ii) required for the Development and Commercialization of the Licensed Vaccines and Licensed Products, including but not limited to, registration dossiers.
- 1.26 "**Development Plan(s)**" shall mean a plan to be mutually agreed between the Parties, as amended by the JSC from time to time, that describes the Development work to be carried out with respect to a Licensed Vaccine and/or Licensed Product, including the responsibilities of each Party, timelines and resource allocation.
- 1.27 "**Field**" shall mean all uses for cancer (including all infection induced tumor types) in humans, including the treatment, prevention, diagnosis and control of cancer.
- 1.28 "**First Commercial Sale**" shall mean, on a country-by-country basis, the first sale of each Licensed Product by or on behalf of BI, its Affiliates or Sublicensees to a Third Party customer in such country in exchange for cash or some equivalent to which financial value can be assigned after such Licensed Product has been granted all Regulatory Approvals by the applicable authorities of such country.

1.29 "FTE" shall mean a full time equivalent person-year based upon a total of [*****] working hours per calendar year of scientific or technical work carried out by a duly qualified employee of CureVac on or directly related to the work to be conducted under the Agreement. Overtime, and work on weekends, holidays and the like shall not be counted with any multiplier (e.g. time-and-a-half or double time) toward the number of hours that are used to calculate the FTE contribution. The portion of a FTE billable by CureVac for one (1) individual during a given accounting period shall be determined by dividing the number of hours worked by said individual on the work to be conducted under the Agreement during such accounting period and the number of FTE hours applicable for such accounting period based [*****] working hours per calendar year.

1.30 "FTE Rate(s)" shall mean, with respect to the following categories of CureVac employees:

- (a) Clinical: [*****];
- (b) Scientist: [*****];
- (c) Technician: [*****],

The FTE Rates include all internal overhead and costs of consumables (unless explicitly specified otherwise in the Development Plans). Excluded are consumable costs for immunomonitoring and exploratory biomarker work as specified in the Development Plans and the costs of Licensed Vaccines. If the consumer price index as published by the German Federal Statistical Office (*Statistisches Bundesamt*) changes by more than [*****] compared to the month of the Effective Date, the FTE Rates shall be adjusted accordingly with effect as of the month following such adjustment. The preceding sentence shall apply *mutatis mutandis* for subsequent changes of the consumer price index compared to the month of the last adjustment of the FTE Rates.

1.31 "**Generic Competition**" shall mean and shall be deemed to exist in a particular country in the Territory with respect to a particular Licensed Product in a given calendar quarter if in such country during such calendar quarter one or more Generic Products (other than a Generic Product sold by BI or its Affiliates or by a Sublicensee under a license granted by BI or its Affiliates) in the aggregate account for more than [*****] of the sum of (i) the aggregate unit sales of such Licensed Product sold by BI or its Affiliates or Sublicensees in such country, and (ii) the aggregate unit sales of the respective Generic Product in such country, as measured by IMS standard units sold based on data provided by IMS International or, if such data is not available, such other reliable data source as reasonably agreed upon by CureVac and BI. If no data is commercially available, then the Parties shall agree upon a methodology for estimating the percentage unit-based market share of Generic Products in such country.

- 1.32** "**Generic Product**" shall mean, with respect to a particular Licensed Product in a particular country, (i) any pharmaceutical product (other than the Licensed Product) that contains the same active ingredient(s) in a comparable quality and quantity as such Licensed Product, irrespective of its pharmaceutical form, and is approved for the same indication as such Licensed Product, as applicable, under an Abbreviated New Drug Application or under 505(b)(2) of the United States Federal Food, Drug and Cosmetic Act or any similar abbreviated route of approval in such country, or (ii) any biologic medicinal product (other than the Licensed Product) that is a Biosimilar Product of such Licensed Product, and is approved under a Biological Product Licensure application submitted by any person under 42 U.S.C. § 262(k) or any similar abbreviated route of approval in such country.
- 1.33** "**Intellectual Property**" shall mean any and all Know How (including copyright and other rights therein), Patent Rights and any trade secrets, trade dress, housemarks and trademarks.
- 1.34** "**Invoice**" shall mean an original invoice sent by CureVac to BI with respect to payment due hereunder containing the information and meeting the requirements as set forth in **Exhibit 1.34**. The Parties shall modify the Invoice requirements by written agreement in the event of a change in the Applicable Laws.
- 1.35** "**Know How**" shall mean all technical, scientific and other information, inventions, discoveries, trade secrets, knowledge, technology, means, methods, processes, practices, formulae, instructions, skills, techniques, procedures, expressed ideas, technical assistance, designs, drawings, assembly procedures, computer programs, apparatuses, specifications, Development Data, results, pre-clinical, clinical, safety, manufacturing and quality control data and information (including trial designs and protocols), registration dossiers and assay and biological methodology, in each case, solely to the extent confidential and proprietary and in written, electronic or any other form now known or hereafter developed. For the avoidance of doubt, Know How includes any such information comprised or embodied in the Materials, if any. For the further avoidance of doubt, any of the foregoing that, through no fault of either of the Parties hereto, its Affiliates or Sublicensees is published or otherwise falls within the public domain shall no longer be deemed Know How.
- 1.36** "**Licensed Product(s)**" shall mean a Licensed Vaccine packaged and labeled for sale in the Territory. Unless otherwise set forth herein, Licensed Products shall include Combination Products and Co-Packaged Products. For purposes of this Agreement, Licensed Products (i) being based on different Licensed Vaccines and/or (ii) being Commercialized under a different label and brand (and not only under a label extension of the original Licensed Product) shall be considered separate Licensed Products. For clarity, the Afatinib Vaccine, the Chemo-Radiation Vaccine and the Checkpoint Inhibitor Vaccine shall be considered one and the same Licensed Product, provided they are based on CV9202. Changes to the delivery system and/or formulation of a Licensed Vaccine and/or the addition of a new indication do not result in an additional Licensed Product unless such altered Licensed Product is Commercialized under a different label and brand (and not only under a label extension of the original Licensed Product).

- 1.37** "**Licensed Vaccine(s)**" shall mean any of the following vaccines: (i) CV9202; and (ii) the [*****] possible vaccines each consisting of [*****], in each case for use in the Field. Upon exercise of the option in accordance with Section 3.2 below, the definition of Licensed Vaccine(s) shall be expanded by the inclusion of (iii) the Option Vaccine. For the avoidance of doubt, subject only to the Option Vaccine, a vaccine comprising CV9202 plus one or more additional RNActive-encoded antigen components is not a Licensed Vaccine. For clarity, this Agreement applies to [*****] Licensed Vaccines including the one (1) Option Vaccine.
- 1.38** "**Major Market Country**" shall mean the [*****].
- 1.39** "**Manufacture**" shall mean all manufacturing operations (including bulk and formulation as well as fill and finish) for Licensed Vaccines, including all activities related to the synthesis, making, production, processing, purifying, formulating, filling, and finishing, of the Licensed Vaccine, or any intermediate thereof, including process development, process qualification and validation, scale-up, pre-clinical, clinical and commercial production and analytic development, product characterization, stability testing, quality assurance, and quality control. "**Manufacturing**" has a correlative meaning.
- 1.40** "**Materials**" shall mean any and all proprietary tangible materials (including biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical materials), including reagents, research tools and compositions of matter. For the avoidance of doubt, Material shall include CV9202.
- 1.41** "**Net Sales**" shall mean the gross amount of sales of Licensed Products invoiced by BI, its Affiliates or Sublicensees to Third Parties, less:
- (a) sales returns and allowances actually paid, granted or accrued, including trade, quantity and cash discounts and any other adjustments, including those granted on account of price adjustments or billing errors, rejected goods, damaged or defective goods, recalls, returns;
 - (b) rebates, chargeback rebates, compulsory rebates, reimbursements or similar payments granted or given to wholesalers or other distributors, buying groups, health care insurance carriers or other institutions and compulsory payments to governmental authorities and any other governmental charges imposed upon the sale of such Licensed Product to Third Parties;
 - (c) adjustments arising from consumer discount programs or other similar programs;
 - (d) non-collectable receivables related to such Licensed Product;
 - (e) customs or excise duties, sales tax, consumption tax, value added tax, and other taxes (except income taxes); and
 - (f) charges for packing, freight, shipping and insurance (to the extent that BI, its Affiliates or Sublicensees bear such cost).

Each of the foregoing deductions shall be determined as incurred in the ordinary course of business in type and amount consistent with good industry practice and in accordance with generally accepted accounting principles or more specifically, the principles of the German commercial code (*Handelsgesetzbuch*) on a basis consistent with BI's audited consolidated financial statements. All such discounts, allowances, credits, rebates, and other deductions shall be fairly and equitably allocated to the Licensed Products and other products of BI and its Affiliates and Sublicensees such that the Licensed Product does not bear a disproportionate portion of such deductions.

For sake of clarity and avoidance of doubt, sales by BI, its Affiliates or Sublicensees of a Licensed Product to any Third Party which distributes products directly to customers in countries where BI has no Affiliate or Sublicensee (e.g., a permitted recognized agent or a third party distributor) shall be considered sales to a Third Party.

Supply of Licensed Products other than for cash shall be substituted to price on bona fide arm's length sales; whereas the price shall be the average price of such Licensed Product sold for cash during the period based on quantity of drug substance sold.

Any Licensed Product used for promotional or advertising purposes or used for clinical trials or other research purposes shall not be included in Net Sales. Donations for charity reasons shall also not be Net Sales.

- 1.42 **"Non-clinical and Clinical Development"** shall mean any Development other than CMC Development.
- 1.43 **"Party"** or **"Parties"** shall mean BI or CureVac, or BI and CureVac, as the context admits.
- 1.44 **"Patent Right"** shall mean any and all (i) issued patents, patent applications, and future patents issued from any such patent applications; (ii) future patents issued from a patent application filed in any country worldwide which claims priority from a patent or patent application of (i); and (iii) reissues, confirmations, renewals, extensions, counterparts, divisions, continuations, continuations-in-part, supplemental protection certificates or utility models based on any patent or patent application of (i) or (ii).
- 1.45 **"Person"** shall mean an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or other similar entity or organization, including a government or political subdivision, department or agency of a government.
- 1.46 **"Phase I Clinical Trial"** shall mean a study of a Licensed Vaccine in human subjects principally for determining initial tolerance, immunogenicity, safety and/or pharmacokinetic information in single dose, single ascending dose, multiple dose and/or multiple ascending dose regimens.
- 1.47 **"Phase I/II Clinical Trial"** shall mean a study of a Licensed Vaccine in human subjects which meets the objectives of both a Phase I Clinical Trial and a Phase II Clinical Trial.

- 1.48 "**Phase II Clinical Trial**" shall mean a study of a Licensed Vaccine in human subjects principally to determine initial clinical efficacy, immunogenicity, and dose range finding before embarking on Phase III Clinical Trials, including any Phase II Clinical Trial which is part of a Phase I/II Clinical Trial or a Phase I through Phase III seamless design Clinical Trial.
- 1.49 "**Phase II/III Clinical Trial**" shall mean a study of a Licensed Vaccine in human subjects which meets the objectives of both a Phase II Clinical Trial and a Phase III Clinical Trial.
- 1.50 "**Phase III Clinical Trial**" shall mean a pivotal study of a Licensed Vaccine in human subjects with a defined dose or a set of defined doses of a Licensed Vaccine principally for the purpose of preparing and submitting applications for Regulatory Approval to the competent Regulatory Authorities in a country of the world, including any Phase III Clinical Trial which is part of a Phase II/III Clinical Trial or a Phase I through Phase III seamless design Clinical Trial.
- 1.51 "**Related Agreements**" shall mean and include all present and future clinical and commercial supply agreements, feasibility agreements, development agreements and license agreements related to the Licensed Vaccines and/or the BI pDNA Process and concluded between the Parties, including the Clinical Supply Agreement, or concluded between CureVac and BI Bio.
- 1.52 "**Regulatory Approvals**" shall mean and include all licenses, permits, authorizations and approvals of, and all registrations, filings and other notifications to, any Regulatory Authority within the Territory, including the United States Food and Drug Administration (FDA), the Japanese Pharmaceuticals and Medical Devices Agency (PMDA), and the European Medicines Agency (EMA), necessary or appropriate for the Development and Commercialization of the Licensed Vaccines and Licensed Products within the Field and in a particular country or region of the Territory.
- 1.53 "**Regulatory Authorities**" shall mean any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity in each country in the Territory involved in the reviewing, granting or revoking of Regulatory Approvals.
- 1.54 "**RNActive**" shall mean CureVac's technology with respect to mRNA encoding an antigenic protein that is expressible in human cells as well as the same mRNA formed as a complex with protamine.
- 1.55 "**Sublicensee**" shall mean any Third Party licensee (aside from BI's Affiliates and any Third Party contractors used by BI in the Non-clinical and Clinical Development and Commercialization of the applicable Licensed Vaccine and/or Licensed Product on BI's behalf) which obtains rights to the CureVac Licensed Intellectual Property, regardless of whether such license is granted by BI, its Affiliates or any Sublicensee.
- 1.56 "**Target Product Profile (TPP)**" shall mean the comprehensive description of the properties which each of the Licensed Vaccines and Licensed Products is intended to have at approval. For each Licensed Vaccine more than one TPP may be defined (e.g., the Afatinib Vaccine and the Chemo-Radiation Vaccine). The Target Product Profile defines the objectives for the Development and creates the basis for the respective Development Plan.

- 1.57 "Taxes" shall mean all present and future taxes, import deposits assessments, and other governmental charges and any related penalties and interest not attributable to the fault or delay of BI.
- 1.58 "Territory" shall mean the entire world.
- 1.59 "Third Party" shall mean any Person aside from BI and its Affiliates and/or CureVac and its Affiliates.
- 1.60 "Valid Claim" shall mean with respect to a particular country, and in each case to the extent contained within (i) a Patent Right which forms part of the CureVac Background Intellectual Property or (ii) a CV9202 Specific Patent Right
- (a) any claim of an issued and unexpired patent in such country that (i) has not been held permanently revoked, unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction, which decision is un-appealed or un-appealable within the time allowed for appeal; and (ii) has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise in such country; or
- (b) a claim of a pending patent application, which claim has not been abandoned or finally disallowed without the possibility of appeal or re-filing of the application; *provided, however*, that once the priority date or earliest filing date to which the pending patent application that comprises such claim refers is more than [*****] old, such claim shall not constitute a Valid Claim for purposes of this Agreement anymore unless and until a patent issues with such claim.

The word "**including**" or any variation thereof means "including without limitation" or any variation thereof and shall not be construed to limit any general statement which it follows to the specific or similar items or matters immediately following it.

Each of the following definitions is set forth in the Section of this Agreement indicated below:

<u>DEFINITION</u>	<u>SECTION</u>
[*****] Process	6.3.1
Additional Cure Period	13.3
Afatinib Vaccine	4.2.3
Agreement	Preamble

<u>DEFINITION</u>	<u>SECTION</u>
Alleged Breaching Party	13.3
Assigned Patent Rights	9.5.3
BI	Preamble
BI Bio	6.4
BI Claim	12.1
BI Losses	12.1
BI Party	12.1
BI pDNA Process	6.4
Breaching Party	13.3
Change of Control	15.2
Checkpoint Inhibitor Vaccine	7.3.1
Chemo-Radiation Vaccine	4.2.3
Claim	12.3.1
Clinical Supply Agreement	6.1
Commercial Facility	6.3.1
Competing Product	4.4
Continuation	7.3.2
CureVac	Preamble
CureVac Claim	12.2
CureVac Losses	12.2
CureVac DMF	4.3
CureVac Party	12.2
CV9202 Development Plan	4.2.1
Data Package	2.3
Disclosing Party	10.1
Dispute Resolution Panel	13.3
DIS Rules	15.6.2
Effective Date	Preamble
Expert Panel	8.6
Initiation	7.3.2
Joint Collaboration Intellectual Property	9.2.2
Joint Invention(s)	9.2.2
Joint Patent Right(s)	9.2.2
Joint Project Team	8.7
Joint Steering Committee	8.1
JSC	8.1
LICR	4.2.5
LICR Collaboration Agreement	4.2.5
Non-Breaching Party	13.3
Option Period	3.1
Option Vaccine	3.1
Permitted Third Party CMO	6.3.2
Receiving Party	10.1
Royalty Term	7.8.3
Third Party Licensor	9.7.1

2. GRANT AND SCOPE OF LICENSE.

2.1 License to Develop and Commercialize Licensed Vaccines and Licensed Products. CureVac hereby grants to BI as of the Effective Date and for the term of this Agreement, and BI hereby accepts, the exclusive license to the CureVac Licensed Intellectual Property for the Non-clinical and Clinical Development, and the Commercialization of Licensed Vaccines and Licensed Products for use in the Field and in the Territory, in accordance with the terms and conditions, and subject to the limitations of this Agreement. Furthermore, BI is entitled to manufacture Licensed Products (but not to Manufacture Licensed Vaccines, subject only to Sections 6.3, 6.5 and 6.6 below). The license shall include the right for the research, development, manufacture, use and commercialization of any diagnostic tools and delivery systems (including formulations required for such delivery systems) required or useful for the Non-clinical and Clinical Development and Commercialization of the Licensed Vaccines and Licensed Products, provided, however, that (i) as of the Effective Date the CureVac Licensed Intellectual Property, except for the Patent Rights identified by the patent family identifier [*****], does not contain any Intellectual Property specific to delivery systems, (ii) CureVac is not obligated to grant rights to BI under Intellectual Property specific to delivery systems and in-licensed by CureVac from Third Parties, and (iii) CureVac gives no representation or warranty that such research, development, manufacture use or commercialization may be possible or successful. The license is exclusive (even as to CureVac), except to the extent set forth in Exhibit 11.2. For example, the rights granted under this Section 2.1 (a) include a non-exclusive sublicense under the Patent Rights identified by the patent family identifiers as [*****] in Exhibit 1.17; (b) include an extension of CureVac's rights to BI, its Affiliates, subcontractors and permitted Sublicensees as "Direct Collaboration Partner" or "Indirect Collaboration Partner" under the Patent Rights identified by the patent family identifiers [*****] in Exhibit 1.17 and licensed to CureVac by Geneart AG, and (c) the Patent Rights identified by the patent family identifiers [*****] in Exhibit 1.17 are subject to a non-exclusive license granted to BioNTech AG, as applicable; the terms and conditions being disclosed to BI and listed in Exhibit 11.2 hereto, and all the rights and licenses listed in (a) to (b) above are subject to the respective head license agreement as set forth in Exhibit 11.2. Furthermore, the licenses are subject to CureVac's right to perform its obligations hereunder.

2.2 Right to Sublicense.

2.2.1 BI shall be entitled to sublicense its rights under Section 2.1 above to any of its Affiliates. Furthermore, BI is entitled to (i) engage Third Party contractors to Non-clinically and Clinically Develop and Commercialize the Licensed Vaccines and Licensed Products on BI's behalf and (ii) to authorize wholesalers and other distributors to Commercialize the Licensed Vaccines and the Licensed Products. Any other sublicenses to Third Parties require CureVac's prior written consent. CureVac will not unreasonably withhold or delay its consent with respect to sub licenses for the Commercialization of the Licensed Vaccines and Licensed Products after receipt of Regulatory Approval on a country-by-country basis.

- 2.2.2 Any right to sublicense to a Sublicensee is subject to the respective sublicense agreement containing terms and conditions that are not inconsistent with those contained in this Agreement, and shall include provisions regarding CureVac's back licenses, CureVac's rights to Collaboration Intellectual Property, confidentiality, indemnification, audit, record-keeping and termination for CureVac's protection that are consistent with those provided herein. BI shall remain liable to CureVac for all obligations under this Agreement, including payment to CureVac of any amounts due on account of sales or other disposition of Licensed Products by Sublicensees. BI shall notify CureVac in writing of any sublicensing agreement (except intra company sublicensing agreements with BI's Affiliates and any agreements with CMOs, CROs, distributors and wholesalers) within [*****] after its execution. Upon request, BI shall provide to CureVac a copy of such sublicensing agreement (except intra company sublicensing agreements with BI's Affiliates and any agreements with CMOs, CROs, distributors and wholesalers), provided that the agreement may be redacted to the extent not necessary for CureVac to understand the scope of such sublicense and determine if BI is in compliance with this Section 2.2.2. All information provided by BI to CureVac under this Section 2.2.2 will be deemed to be Confidential Information of BI and will be subject to the terms of Article 10 hereof.
- 2.3 **Technology Data Package Transfer.** In furtherance of the rights and licenses granted by CureVac to BI under this Agreement, during the first [*****] after the Effective Date CureVac shall furnish to BI within [*****] of BI's prior request, a data package that shall include all details of the CureVac Licensed Intellectual Property which are required for the Non-clinical and Clinical Development by BI of the Licensed Vaccines ("**Data Package**"). For clarity and subject to Sections 6.3 and 6.5 below, while CureVac will remain the holder of the CureVac DMF and BI has no right under this Agreement to modify or amend the CureVac DMF or to file the same with any authority, such Data Package shall include all CMC-related documents to the extent such documents are existing and Controlled by CureVac and which are needed for regulatory purposes, in particular the most recent, entire drug master file for CV9202. For the avoidance of doubt, failure by BI to request the Data Package shall not constitute a waiver of any of BI's rights under this Agreement. BI shall not use any of the Data Package furnished by CureVac under this Section 2.3 for any purpose whatsoever, except as authorized in this Agreement or any Related Agreement. In the event BI reasonably believes that the Data Package furnished by CureVac under this Section 2.3 is incomplete, within [*****] of receipt of the Data Package, BI shall provide written notice thereof to CureVac, and CureVac shall furnish such missing data concerning such Data Package within [*****] after receipt of BI's written notice hereunder. As part of the Non-clinical and Clinical Development Support to be provided by CureVac under Section 4.1 below, CureVac shall answer all reasonable questions received from BI regarding such transferred Data Package as soon as reasonably possible after receipt.
- 2.4 **Documents and Declarations.** CureVac shall execute all documents, give all declarations regarding the licenses granted hereunder and reasonably cooperate with BI to the extent such documents, declarations and/or cooperation are required for the recording or registration of the licenses granted hereunder at the various patent offices in the Territory for the benefit of BI. BI shall reimburse CureVac for its reasonable external out-of-pocket costs associated therewith. ‘

- 2.5 **No Additional Rights.** Nothing in this Agreement shall be deemed or implied to be, and the Parties disclaim all implied rights to, the grant by either Party to the other Party of any right, title or interest in any product, Intellectual Property, any formulation technology, operating procedures, marketing materials or strategies, intangibles, material or proprietary rights except as are expressly set forth in this Agreement.
- 2.6 **Trademarks, Etc.** For the avoidance of doubt, BI, its Affiliates and its permitted Sublicensees shall be solely responsible for selecting and shall retain all ownership and control over all designs, trade dress and trademarks, and BI's, its Affiliates' and its permitted Sublicensees' use with respect to the Licensed Products, and subject only to Section 14.4, CureVac shall have no rights whatsoever to the use thereof.
3. **EXCLUSIVE OPTION**
- 3.1 **Option.** As of the Effective Date and in consideration for the option fee as set forth in Section 7.2, CureVac hereby grants to BI, and BI hereby accepts, an exclusive option for a maximum term of ten (10) years after the Effective Date ("**Option Period**") to obtain one additional exclusive license, for no additional fee, to use the CureVac Licensed Intellectual Property with regard to one additional vaccine that consists of [*****] for use in the Field ("**Option Vaccine**"). For clarity, in order to protect BI's exclusive option, during the Option Period CureVac shall not grant any license to any Third Party for [*****].
- 3.2 **Exercise of the Option.** BI may exercise the option under Section 3.1 once by way of written notice to CureVac during the Option Period. In such notice, BI shall propose to CureVac a [*****] and CureVac shall only be entitled to withhold its consent to such [*****] if - at the time BI exercises the option and proposes a [*****] - neither CureVac nor BI Controls the rights required to include the proposed [*****] in the Option Vaccine. Upon written agreement on the identity of such [*****] the exercise of such option shall become effective for the Option Vaccine in respect of such agreed [*****], and the option rights under this Article 3 shall terminate.
- 3.3 **Extension of CureVac Licensed Intellectual Property.** In the event CureVac Controls any additional Intellectual Property which is specific to [*****] selected by BI (e.g., Patent Rights protecting the composition of matter or use of such antigen) and is not licensed under Section 2.1, it shall inform BI hereof and upon exercise of the Option the CureVac Background Intellectual Property shall also include such specific additional Intellectual Property, *provided*, that BI reimburses CureVac for all past and future payments towards Third Parties, if any, solely to the extent such payments are required for the use of such additional Intellectual Property for the Non-clinical and Clinical Development and Commercialization of the Option Vaccine.

4. DEVELOPMENT OF LICENSED VACCINES.**4.1 Non-clinical and Clinical Development Support.**

- 4.1.1 BI and CureVac will collaborate on the Development of the Licensed Vaccines, and CureVac will provide certain activities to progress the Non-clinical and Clinical Development of the Licensed Vaccines. Such activities shall include the wind down in an orderly fashion of all already ongoing Phase I Clinical Trials set forth in Exhibit 4.5A as sponsor of such study, and CureVac shall provide electronic copies of all Development Data, in particular all safety, efficacy and immunomonitoring data, of such Clinical Trials to BL Furthermore, CureVac will provide certain activities to ensure, inter alia, a smooth transition of the Non-clinical and Clinical Development of the Licensed Vaccines to BL The scope of the activities to be performed by CureVac, the number of Cure Vac's FTEs to perform such activities, and the budget estimations to perform such activities (including CureVac's out of pocket expenses) are set out in the respective Development Plans for the Licensed Vaccines. In addition to the FTE Rates, BI shall compensate any out of pocket expenses incurred by CureVac in accordance with the Development Plans. CureVac shall be required to make the FTEs set forth in the Development Plans available, and BI shall fully compensate such agreed FTE resources during the agreed time period and at the FTE Rates. The FTE resource commitments shall be binding on both Parties on a [*****] rolling basis. The compensation is to be paid by BI to CureVac on a Calendar Quarterly basis. Payment shall be made in arrears and within [*****] upon receipt of an Invoice detailing with supportive documentation, the FTE costs and out of pocket expenses applicable to CureVac's efforts for such applicable Calendar Quarter period, such information to include the work packages of the Development Plans worked on, the number and type of FTE assigned to each work package and the out of pocket expenses. Notwithstanding the foregoing, CRO costs incurred by CureVac after the Effective Date in connection with the Phase I Clinical Trials listed in Exhibit 4.5A shall be invoiced separately by CureVac upon CureVac's receipt of such CRO's invoice, and irrespective of whether such payments are made in advance or in arrears, such Invoice to be due and payable within [*****] upon receipt of such Invoice by BI, provided that if BI reimburses CureVac for advance payments made by CureVac to CROs, CureVac shall provide the final actual cost per invoiced period and a true up of actual cost compared to advance payment (planned cost) to BL If the advance payment(s) turn out to be higher than the actual cost incurred by CureVac, CureVac shall reimburse the respective amount of the advance payment to BL
- 4.1.2 As long as CureVac provides Non-clinical and Clinical Development support under Section 4.1.1 above, CureVac shall maintain complete and accurate books and records regarding the FTEs and all out of pocket expenses (including CRO costs) invoiced to BI, as necessary to allow the accurate calculation of payments due hereunder. CureVac shall retain these records for [*****] after the end of the calendar year to which they pertain. Once per calendar year, and no more than once for the records as to any given calendar year, BI shall have the right to engage an independent accounting firm reasonably acceptable to CureVac, at BI's expense, which shall have the right to examine in confidence the relevant CureVac records as may be reasonably necessary to determine and/or verify the amount of payments due hereunder. In the event there was an over-payment by BI hereunder, CureVac shall promptly (but in no event later than [*****] after CureVac's receipt of the independent auditor's report) make payment to BI of any overpayment amounts. In the event that there was an under-payment by BI hereunder, BI shall promptly (but in no event later than [*****] after BI's receipt of the independent auditor's report) pay CureVac the underpayment amount. In the event any payment by BI shall prove to have been incorrect by more than five percent (5%) to BI's detriment for the entire period audited, CureVac will pay the reasonable fees and costs of BI's independent auditor for conducting such audit.

4.2 Diligence.

- 4.2.1 Subject to the terms of this Agreement, BI shall use its Commercially Reasonable Efforts to progress the Non-clinical and Clinical Development of the Licensed Vaccines and Licensed Products in accordance with the respective Development Plans, including the Development Plan attached hereto as **Exhibit 4.2** and as modified and amended by the JSC from time to time in accordance with Section 8 below ("**CV9202 Development Plan**") and to Commercialize the Licensed Products in the Territory, *provided, however* that Development activities listed in the CV9202 Development Plan under the heading "Life Cycle Management" shall be at BI's sole discretion. Notwithstanding the foregoing, after First Commercial Sale of the first Licensed Product in a Major Market Country the JSC shall discuss and decide whether such Licensed Product will be Developed in a second and/or third indication. If the JSC decides to Develop such Licensed Product in a second and/or third indication, the Parties shall amend the respective Development Plan and BI's diligence obligations will be increased so that BI shall use its Commercially Reasonable Efforts to also progress the Non-clinical and Clinical Development of such second and/or third indication. The Development Plans are to set forth, inter alia, (a) the Development work (including CMC Development) to be performed by BI and by CureVac under and during the term of this Agreement; (b) the activities to be performed by CureVac to support the Non-clinical and Clinical Development as further specified in Section 4.1 above; (c) the Clinical Trials to be performed for each clinical phase, including (i) the Clinical Trials to be performed for the Afatinib Vaccine; and (ii) the Clinical Trials to be performed for the Chemo-Radiation Vaccine; and (d) the time estimated for each Clinical Trial.
- 4.2.2 In the event BI exercises its option under Article 3 above, BI shall promptly prepare a Development Plan for the Option Vaccine, such Development Plan to meet the criteria set forth under Section 4.2.1 above, coordinate such Development Plan for approval within the JSC, and use its Commercially Reasonable Efforts to progress the Non-clinical and Clinical Development of the Option Vaccine and any Licensed Product containing such Option Vaccine in accordance with the Development Plan, and to Commercialize such Licensed Product in the Territory. For the avoidance of doubt, the diligence obligations under Section 4.2.4 below shall also apply to the Option Vaccine in the event BI exercises such option.
- 4.2.3 BI shall initiate the clinical development with CV9202 of:
- (a) [*****]; **and**
 - (b) [*****],

and not terminate or halt the Non-clinical and Clinical Development unless there are substantial and reasonable technical, safety, efficacy and/or regulatory reasons for doing so, and details of such technical safety, efficacy and/or regulatory have been notified to CureVac in writing through the JSC.

4.2.4 The diligence obligations set forth above include the following specific activities: BI shall

- (a) use its Commercially Reasonable Efforts, subsequent to the respective positive Phase I and Phase II Clinical Trials referenced in Section 4.2.3 above, to initiate Phase III Clinical Trials regarding the Licensed Vaccines;
- (b) conduct all Non-clinical and Clinical Development activities in a timely manner and allocate such Development budgets as are reasonable and adequate to progress the Non-clinical and Clinical Development of Licensed Vaccines hereunder;
- (c) when appropriate based on satisfactory data obtained during the Non-clinical and Clinical Development, use its Commercially Reasonable Efforts to secure all required Regulatory Approvals in the Major Market Countries following completion of all appropriate Clinical Trials; and
- (d) use its Commercially Reasonable Efforts to make the First Commercial Sale of the Licensed Products in each Major Market Country following the issuance of the Regulatory Approvals as well as pricing and reimbursement approvals (if any).

For the avoidance of doubt, the specific diligence obligations under (a) to (d) shall not apply outside of the Major Market Countries.

4.2.5 The Parties agree that BI will assume all of CureVac's rights and obligations (*Vertragsubernahme*) under the collaboration agreement between CureVac, the Cancer Research Institute and the Ludwig Institute for Cancer Research (the Cancer Research Institute and the Ludwig Institute for Cancer Research collectively "**LICR**") entered into as of October 21, 2013 ("**LICR Collaboration Agreement**"), and CureVac shall use Commercially Reasonable Efforts to procure LICR's consent thereto. BI will use Commercially Reasonable Efforts and collaborate with LICR to [*****], provided, however, that BI is not obliged to (a) [*****]; or (b) perform studies with a commercially available [*****]. For purposes of this Agreement, any data and information generated by the LICR in such combination trials and not in the public domain shall be considered Confidential Information of BI. BI will grant and hereby grants to CureVac a non-exclusive license to any such Confidential Information generated by the LICR and Controlled by BI with respect to the [*****] for CureVac to use such Confidential Information in support and promotion of its RActive technology for any purposes other than the Licensed Vaccines, provided, however, that (i) CureVac shall disclose such Confidential Information to a Third Party solely under an appropriate confidentiality agreement with such Third Party and (ii) prior to such disclosure to a Third Party CureVac shall send to BI the Confidential Information CureVac wishes to disclose and CureVac agrees to withhold disclosure of same for the time necessary to permit BI to obtain optimum patent protections such time period not to exceed [*****] except as required for coordination of such patent protection with BI's collaboration partners other than CureVac. CureVac shall comply with BI's request to withhold disclosure for the time necessary to permit BI to obtain optimum patent protection. In the event CureVac is, despite its Commercially Reasonable Efforts, unable to transfer its rights and obligations regarding the Licensed Vaccines under the LICR Collaboration Agreement to BI, CureVac will exercise the LICR Collaboration Agreement with respect to the Licensed Vaccines upon the direction of BI and BI shall refund any payments to be made to LICR and any costs incurred by CureVac under the collaboration with LICR with respect to the Licensed Vaccines to CureVac.

- 4.2.6 Subject to Section 6.3 below, CureVac shall use its Commercially Reasonable Efforts to progress the CMC Development of the Licensed Vaccines in accordance with the respective Development Plans for the Licensed Products. In particular, CureVac shall conduct all CMC Development activities in a timely manner and allocate such budgets as are reasonable and adequate to progress the CMC Development of Licensed Vaccines at CureVac hereunder in accordance with the Development Plans. Upon CureVac's request, BI shall use its Commercially Reasonable Efforts to support CureVac in the CMC Development by providing any information and/or documentation required by CureVac for the CMC Development.
- 4.3 **Regulatory Matters.** With the exception of the drug master file (or equivalent) for Licensed Vaccines and Licensed Products ("**CureVac DMF**") and all Manufacturing permits and authorizations necessary for the Manufacture of the Licensed Vaccines, BI shall be solely responsible for all regulatory matters including the filing for approvals to the Licensed Vaccines and Licensed Products in the Field. BI shall own, directly or through an Affiliate, all Regulatory Approvals. With the exception only of matters which require prompt attendance, CureVac shall have the right and the obligation to review and comment on all regulatory filings inasmuch as they relate to the Licensed Vaccines and Licensed Products, and BI will take such comments into reasonable consideration. Furthermore, BI will provide copies of all regulatory approvals and material correspondence with Regulatory Authorities in the Major Market Countries relating to the Clinical Trials with respect to Licensed Vaccines and Licensed Products to CureVac, and will reasonably consider a request by CureVac to participate in a meeting with Regulatory Authorities. Notwithstanding the foregoing, CureVac shall have the right and the obligation to participate in a meeting with Regulatory Authorities if and to the extent such meeting relates to the CMC Development. For the avoidance of doubt, BI will have final say on all regulatory matters of the Licensed Vaccines, and the dispute resolution process laid down in Sections 8.5 and 8.6 of this Agreement does not apply. CureVac shall use Commercially Reasonable Efforts to support BI on all regulatory matters with respect to the Non-clinical and Clinical Development and Commercialization of the Licensed Vaccines and Licensed Products and shall maintain all permits and authorizations necessary for the Manufacture of the Licensed Vaccines, including the CureVac DMF. CureVac shall use Commercially Reasonable Efforts to generate and provide to BI (i) CMC Development-related and Manufacturing-related documentation, data and reports, including those listed in **Exhibit 4.3**, and (ii) CMC Development-related technical and other assistance, in each case (i) and (ii) as reasonably required for obtaining Regulatory Approvals and for required interactions with Regulatory Authorities regarding the Licensed Vaccines, including scientific advices. In addition to the obligations under Section 10 below, BI shall ensure that such CMC Development- and/or Manufacturing-related documentation, data and reports are not circulated within BI's and BI's Affiliates' organizations except as required for the purposes mentioned in the foregoing sentence. Each Party shall designate one or more individual(s) to facilitate the provision of the documentation, materials, data and reports as described in this Section 4.3. To the extent required by a Party, a BI Affiliate or a CureVac Affiliate to achieve or maintain regulatory clinical trial and/or marketing application approvals or to comply with any related requests from regulatory authorities related to the Licensed Vaccines, or, if so required by CureVac or by a CureVac Affiliate, to any RNA based product owned or in-licensed by CureVac or its Affiliate, the Parties shall authorize and hereby authorize each other or their respective Affiliate (but not licensees of the other Party) to cross reference to the sections of the IND/regulatory dossiers of the clinical trials related to vaccines or RNA based products Controlled by the other Party or its Affiliate and to any other relevant regulatory filings and any other relevant documentation Controlled by the other Party or its Affiliate. The Parties shall inform each other in writing prior to any such cross-referencing. BI shall consider in good faith any request by CureVac to authorize a future licensee of CureVac to cross-reference to the sections of the IND/regulatory dossiers of the Clinical Trials related to Licensed Vaccine or Licensed Product.

- 4.4 Competing Products.** In the event BI, any of its Affiliates or any of its Sublicensees outside the scope of this Agreement commences clinical trials or commercialization of any mRNA-based, protamine-complexed vaccine targeting any of the indications for which BI is Developing the Licensed Vaccines or Commercializing the Licensed Products ("**Competing Product**"), and irrespective of whether BI used the CureVac Licensed Intellectual Property to develop such Competing Product, CureVac shall be entitled to terminate the exclusivity of the licenses under Section 2.1 above, so that BI shall retain non-exclusive licenses under Section 2.1, but the remaining provisions of this Agreement remain in full force and effect; and BI shall grant to CureVac a non-exclusive license, including the right to grant sublicenses in multiple tiers, to use any of the BI Collaboration Intellectual Property (other than [*****] BI Background Intellectual Property) for the Development, Manufacture and Commercialization of the Licensed Vaccines.
- 4.5 Development and Commercialization Costs.** As of the Effective Date and unless otherwise agreed, BI will bear (i) any and all costs regarding the Non-clinical and Clinical Development in accordance with the Development Plans, and Commercialization of the Licensed Vaccines and Licensed Products in the Field and in the Territory, (ii) any ongoing costs related to running Clinical Trials with respect to the Licensed Vaccines, as specified in **Exhibit 4.5A**, and (iii) the costs of future combination trials under the LICR Collaboration Agreement. Notwithstanding the foregoing, any payment obligations arising from the existing license agreements between CureVac and (i) [*****], (ii) the [*****] and (iii) [*****] as such license agreements are further specified in **Exhibit 4.5B** hereto, shall be solely borne by CureVac. Subject to Section 8.5 (fourth sentence) below, any costs incurred by CureVac in relation to CMC Development in accordance with the Development Plans will be solely borne by CureVac.

5. REPORTING OBLIGATIONS.

- 5.1 Regulatory Reporting.** BI shall be responsible for filing all reports required to be filed in order to maintain any Regulatory Approvals granted for Licensed Vaccines and Licensed Products in the Territory.
- 5.2 Sales Projections.** Commencing on the first December 1 following the date of the First Commercial Sale in the Territory, BI shall provide CureVac on or before December 1 in each calendar year with a confidential, non-binding sales forecast for the upcoming calendar year of the estimated aggregate (i) worldwide sales of Licensed Products and (ii) sales of Licensed Products in each Major Market Country. Subject to its diligence obligations hereunder, BI shall be solely responsible for all aspects of the commercialization and sale of Licensed Products.
- 5.3 Pharmacovigilance.** The Parties shall have in place and will maintain until the expiration (or earlier termination) of this Agreement (or, as applicable, until the obligations intended to survive termination of this Agreement have been fulfilled) systems, procedures, training programs and documentation needed to perform and comply with their pharmacovigilance regulatory obligations, and each Party shall promptly inform the other Party of any safety issues that may arise and that need to be reported under Applicable Laws. Each Party will ensure that it complies with all Applicable Laws regarding the Licensed Vaccine and Licensed Product relating to risk management, drug safety and pharmacovigilance. The Parties shall negotiate in good faith and conclude, on or before [*****] a pharmacovigilance agreement.

6. MANUFACTURE AND SUPPLY.

- 6.1 Clinical Supply.** All Licensed Vaccines required for use by BI in accordance with this Agreement for the Non-clinical and Clinical Development of the Licensed Vaccines up to and including Phase II Clinical Trials shall be Manufactured by CureVac in accordance with Applicable Laws and the terms and conditions of the Clinical Supply Agreement attached hereto as **Exhibit 6.1 ("Clinical Supply Agreement")**.
- 6.2 Phase III Clinical Supply and Commercial Supply.** CureVac shall have the right and the obligation to Manufacture Licensed Vaccines for use in Phase III Clinical Trials and for the Commercialization of Licensed Products under this Agreement, the right and the obligation to Manufacture being subject to the right of CureVac to
- (a) waive its right and obligation to Manufacture all Licensed Vaccines for use in Phase III Clinical Trials and for the Commercialization of the Licensed Products by notifying BI of such waiver in writing on or before [*****] and, if CureVac has not provided such notice,
 - (b) waive its right and obligation to Manufacture all Licensed Vaccines for the Commercialization of the Licensed Products by notifying BI of such waiver in writing on or before [*****]; provided, however, that if CureVac does not notify BI in writing on or before [*****] that CureVac will not waive its right and obligation to Manufacture all Licensed Vaccines for the Commercialization of the Licensed Products, BI shall have the right to request by written notice to CureVac that CureVac (i) authorizes a BI Affiliate located in Austria or Germany, such Affiliate to be designated by BI in said written notice, to conduct non-GMP production of CV9202 in lab scale experiments (on "process-science" level only), *provided*, that CureVac shall have the right to observe and consult on such lab scale experiments, and (ii) provide access to such BI Affiliate to the following data and information and such additional data and information as may be agreed to by the JSC, in each case to the extent necessary or useful for such activities and Controlled by CureVac (such data and information shall be considered Confidential Information of CureVac):

- o Protocols for [*****];
- o Information on [*****]; and
- o Protocols for [*****]

in each case (i) and (ii) to enable BI to prepare for a potential future GMP Manufacturing of Licensed Vaccines by a BI Affiliate or a Permitted Third Party CMO (as defined in Section 6.3.2 below). In the event CureVac does not provide notice of waiver as set forth under (a) and (b) above and achieves all milestone events set forth under Section 6.3.1(b) below, BI shall return or destroy, as instructed by CureVac, all Confidential Information of CureVac set forth above and any materials and results generated in the course of the lab scale experiments and confirm such return or destruction in writing to CureVac, save that BI may retain copies of such results and of CureVac's Confidential Information as set forth in Section 10.5 below.

Before [*****] the Parties shall negotiate in good faith commercially reasonable terms and conditions of an amendment to the Clinical Supply Agreement and conclude such amendment in order to cover Phase III Clinical Trial supply in accordance with the terms and conditions of the binding term sheet attached as **Exhibit 6.2A** hereto, unless CureVac is providing notice of waiver as set forth in (a) above before or during such negotiations. If CureVac has not provided the notice of waiver as set forth in (a) above within the prescribed time, before [*****] the Parties shall negotiate in good faith commercially reasonable terms and conditions of a commercial supply agreement and conclude such commercial supply agreement in accordance with the terms and conditions of the binding term sheet attached as **Exhibit 6.2B** hereto, unless CureVac has provided notice of waiver as set forth in (b) above before or during such negotiations. The Parties will negotiate in good faith any amendment to the commercial supply agreement which either Party requests and which may be necessary or useful to adapt the agreement to potential changes in the Development Plan or to the Licensed Vaccine after [*****]. In order to reach a common understanding about the methods of cost allocation for the Licensed Vaccine cost calculation for the Phase III Clinical Trial supply and for the commercial supply as well as in order to be able to audit such costs, BI and CureVac shall agree upon the calculation method and the content of the calculation in good faith. On or before [*****] CureVac shall describe its current methods of cost allocation for product cost calculation, such description to detail the following elements:

- o cost center structure and costs booked to these cost centers
- o method of allocation for cost centers
- o calculation of hourly rates for personnel
- o calculation of hourly rates for plants
- o differentiation of idle capacity
- o overhead calculation method
- o definition of standard price for negotiation

6.3 Manufacturing by BI.

6.3.1 If CureVac

- (a) provides notice of waiver as set forth in Section 6.2 (a) or (b) above within the prescribed time to BI;
- (b) fails to achieve any one of the following milestone events
 - (i) CureVac provides the results of the ongoing feasibility study concerning the (x) upscaling of the current [*****] Manufacturing process (such upscaled Manufacturing process being defined as the "[*****] **Process**"); (y) the reconstruction of CureVac's existing pilot plant to implement the [*****] Process at said pilot plant; and (z) the construction of a commercial facility for, *inter alia*, the Manufacturing of Licensed Vaccines for the Commercialization of the Licensed Products ("**Commercial Facility**"), such results (including an evaluation of at least one (1) of the CV9202 plasmid DNAs if such material has been provided to CureVac under the Material Transfer and Feasibility Study Agreement (**Exhibit 6.4A**) below on or before [*****], *provided, however*, that the outcome of the evaluation of the CV9202 plasmid DNAs shall not determine the achievement of this milestone) of the feasibility study to be provided to BI on or before [*****] or any later point in time agreed by the JSC, and the JSC confirms that the results of the ongoing feasibility study with respect to (x), (y) and (z) demonstrates that it meets the objectives set by the JSC prior to completion of the feasibility study and consequently supports CureVac's ability to Manufacture for Phase III Clinical Trial supply and commercial supply for purposes of this Agreement;
 - (ii) the comparability concept of the [*****] Process to the existing [*****] Manufacturing process at CureVac's pilot plant has been discussed and clarified with the EMA and the FDA on or before [*****] or any later point in time if so delayed by the JSC or such delay is caused by BI internal processes;
 - (iii) the EMA and the FDA accept the comparability of the [*****] Process to the existing [*****] Manufacturing process at CureVac's pilot plant on or before [*****] or any later point in time if so delayed by the JSC or such delay is caused by BI internal processes; and

- (iv) CureVac makes a final decision to build a Commercial Facility and notifies BI of such decision on or before [*****]; or
- (c) is in material breach of its obligations - if any - to Manufacture and supply Licensed Vaccines in accordance with a Related Agreement, has been notified by BI of such material breach and does not cure such material breach within the time periods set forth in the respective Related Agreement,

BI shall be entitled to Manufacture Licensed Vaccines, and CureVac shall grant and hereby grants to BI and BI accepts a non-exclusive, royalty-free and perpetual, non-transferable license (with the right to grant sub-licenses solely to Affiliates located in [*****], *provided* such Affiliate enters into a direct agreement with CureVac containing a direct extension of rights in-licensed by CureVac from Geneart with respect to the Manufacture of Licensed Vaccines and confidentiality obligations corresponding to the ones set forth in Sections 4.3 and 10 below, under CureVac's then existing CureVac Licensed Manufacturing Intellectual Property for the CMC Development and the Manufacturing of Licensed Vaccines and Licensed Products solely for use by BI under the license granted in Section 2.1, provided that any sub-license or extensions of rights granted to BI shall be subject to the terms and conditions of any then existing head-license agreements. Any dispute concerning the achievement of one of the milestone events set forth above shall be resolved in accordance with the provisions of Sections 8.5 and 8.6 below.

- 6.3.2 BI shall have the right to engage a Third Party contract manufacturer located [*****] ("**Permitted Third Party CMO**") to Manufacture Licensed Vaccines by providing written notice of such intent and the identity of the contract manufacturer to CureVac, provided that
- (a) CureVac shall be permitted to veto the engagement of such contract manufacturer if (i) CureVac has reasonable grounds to believe that such contract manufacturer will not (x) protect CureVac's Confidential Information including CureVac's proprietary Materials in accordance with the standards set forth in Sections 4.3 and 10 or (y) be able to Manufacture the Licensed Vaccines in accordance with Applicable Laws, and (ii) CureVac provides to BI written documentation supporting such reasonable grounds to BI within [*****] of receipt by CureVac of BI's written notice identifying the contract manufacturer;
 - (b) BI ensures that the Permitted Third Party CMO meets all obligations of BI under this Section 6, including the obligation set forth in Section 6.3.3 below, and BI makes available a copy of the agreement (redacted to exclude only information on compensation of the Permitted Third Party CMO) with the Permitted Third Party CMO to CureVac; **and**
 - (c) the Third Party contract manufacturer enters into a direct agreement with CureVac containing a direct extension of rights from Geneart with respect to the Manufacture of the Licensed Vaccines, confidentiality obligations and Material transfer obligations corresponding to the ones set forth in Sections 4.3 and 10.

- 6.3.3 Any improvements generated by or on behalf of BI to any CureVac Licensed Manufacturing Intellectual Property will be assigned and transferred, and are hereby assigned and transferred to CureVac (and CureVac will accept and hereby accepts such assignment and transfer) and licensed back to BI, on a non-exclusive, cost-free and perpetual basis, with the right to (a) grant sub-licenses to Affiliates and (b) enable the Permitted Third Party CMO to make use of such improvements; and any other Intellectual Property generated by BI with respect to the Manufacturing of the Licensed Vaccine, except for such Intellectual Property related to the BI pDNA Process and generated under a Related Agreement specific to such pDNA Process, will be licensed, and is hereby licensed to CureVac on a non-exclusive, cost-free and perpetual basis, with the right to sublicense, for any purpose other than the Commercialization of the Licensed Products during the term of this Agreement.
- 6.3.4 Furthermore, (a) each Party shall be released from its respective obligations to enter into any agreement contemplated by Sections 6.2 and 6.4 of this Agreement; (b) upon BI's written request, BI shall be released from any obligation under the Related Agreements to purchase Licensed Vaccines from CureVac except for such deliveries listed in a Related Agreement's Delivery Schedule which have already become binding on the date of BI's written request; **and** (c) BI shall have the right to request from CureVac by written notice the transfer of CureVac's CMC Development activities and the Manufacturing technology required for the Manufacture of Licensed Vaccines solely to the entity which will be Manufacturing the Licensed Vaccine under the licenses granted under Section 6.3.1, i.e., to BI, to a BI Affiliate or to the Permitted Third Party CMO. Upon receipt of such written notice by CureVac, CureVac shall, use Commercially Reasonable Efforts to (aa) transfer all data and information to the extent necessary or useful for such activities and Controlled by CureVac (such data and information shall be considered Confidential Information of CureVac) and (bb) provide all support, in each case (aa) and (bb) as reasonably required for BI, the BI Affiliate or the Permitted Third Party CMO, as applicable, to take over the CMC Development activities and the Manufacturing of the Licensed Vaccines. The transfer of such data and information and the support under (aa) and (bb) shall be at no cost to BI, with the exception only of travel costs and travel time, if and to the extent the transfer or support is to be provided at any place outside of Europe. -
- 6.3.5 In consideration for CureVac's significant past investments and established Manufacturing Intellectual Property, technology and processes, BI shall pay to CureVac a one-off technology transfer fee in the amount of [*****] solely when and if the following conditions are met: (a) the Manufacturing by BI was triggered by the events as set forth in Section 6.3.1 (a); 6.3.1 (b)(i); or Section 6.3.1 (b)(iv); (b) BI makes the First Commercial Sale of a Licensed Product in the USA; and (c) at the time of such First Commercial Sale BI, a BI Affiliate or a Permitted Third Party CMO has Manufactured Licensed Vaccines and CureVac is not Manufacturing Licensed Vaccines or is Manufacturing Licensed Vaccines only as a second source supplier of BI under a separate supply agreement with BI. Such payment shall be due and payable within [*****] after receipt of a respective Invoice.

6.4 Plasmid DNA as Precursor for Licensed Vaccines. The Parties aspire that CureVac will manufacture plasmid DNA needed as a precursor for the Manufacture of Licensed Vaccines for Phase III Clinical Trials and commercial supply and potentially also for other RNA based products owned or in-licensed by CureVac in accordance with a manufacturing process to be developed by BI's Affiliate Boehringer Ingelheim Biopharmaceuticals GmbH ("**BI Bio**") and transferred to CureVac ("**BI pDNA Process**"). To this end, CureVac will provide all necessary materials (e.g., plasmid DNA samples) as well as information and a BI Affiliate will conduct a feasibility study in accordance with the Material Transfer and Feasibility Study Agreement (Exhibit 6.4A). As soon as possible after both Parties have generated all data necessary for assessing whether the quality of the BI pDNA Process (i.e., the analytical results are within the specifications agreed between the Parties at the start of the pDNA feasibility study) meets CureVac's requirements and the plasmid DNA manufactured in accordance with the BI pDNA Process meets the requirements agreed between the Parties, including requirements for RNA based products other than Licensed Vaccines, the Parties shall discuss such data in the Joint Project Team, and the Joint Project Team will provide a recommendation to the JSC. If the JSC decides that the BI pDNA Process and the plasmid DNA manufactured in accordance with the BI pDNA Process meet the requirements set forth in the foregoing sentence, CureVac shall and BI shall ensure that BI Bio will negotiate in good faith commercially reasonable terms and conditions of a license agreement concerning the BI pDNA Process, such terms and conditions to (i) be in accordance with the terms and conditions of the binding term sheet attached hereto as **Exhibit 6.4B** and (ii) insofar as Exhibit 6.4B does not provide otherwise, substantially correspond to the terms and conditions of the license agreement between CureVac and its plasmid DNA development partner on the Effective Date. In order to ensure the availability of plasmid DNA as a precursor for the manufacture of Licensed Vaccines in case the JSC decides that the quality of the BI pDNA Process and/or the plasmid DNA manufactured in accordance with the BI pDNA Process does not meet the requirements agreed between the Parties or CureVac and BI Bio do not reach agreement on a BI pDNA Process license agreement, CureVac shall and BI shall ensure that BI Bio will negotiate in good faith commercially reasonable terms and conditions of and conclude on or before [*****] either

- (a) a license agreement concerning a manufacturing process to be developed by BI Bio and transferred to CureVac for the manufacture of plasmid DNA that will be used as precursor solely for the manufacture of Licensed Vaccines; or
- (b) a supply agreement under which BI Bio would supply plasmid DNA to CureVac, such plasmid DNA to be used solely as precursor for the manufacture of Licensed Vaccines.

If the Parties, despite good faith efforts, do not conclude one of the plasmid DNA-related agreements set forth above by [*****] the Parties shall agree on involving a Third Party in the manufacturing of plasmid DNA needed as a precursor for the Manufacture of Licensed Vaccines.

- 6.5 Manufacturing by BI After Expiry of the Agreement.** Upon expiry of the Agreement in all countries and for all Licensed Products, and if CureVac was still Manufacturing the Licensed Vaccines under this Agreement at the time of expiry, CureVac will reasonably consider to continue supplying BI at terms and conditions corresponding to the ones applicable before the expiry of the Agreement, subject only to reasonable price adjustment to reflect any changes in raw material and labor costs, and the Parties shall conduct good faith negotiations for CureVac to continue supplying Licensed Vaccines. In the event the Parties cannot agree in such good faith negotiations, BI shall have the right to request from CureVac, by written notice prior to expiry of this Agreement, the grant to BI of a non-exclusive, royalty-free and perpetual license under CureVac's then existing CureVac Licensed Manufacturing Intellectual Property for the CMC Development and the Manufacturing of Licensed Vaccines and Licensed Products, with the right to grant sub-licenses to Affiliates and to engage Permitted Third Party CMOs, for use by BI under the retained license of Section 13.1. Upon receipt of such written notice by CureVac, CureVac shall use Commercially Reasonable Efforts to (i) transfer all data and information to the extent necessary or useful for such activities and Controlled by CureVac (such data and information to be considered Confidential Information of CureVac), and (ii) provide all support, in each case (i) and (ii) as reasonably required for BI, the BI Affiliate or the Permitted Third Party CMO to take over the Manufacturing of the Licensed Vaccines, such license and transfer being subject to the additional limitations set forth in the last paragraph of Section 6.3.1 and Sections 6.3.2 and 6.3.3 applied by analogy. The transfer of such data and information and the support under (i) and (ii) shall be at no cost to BI, with the exception only of travel costs and travel time, if and to the extent the transfer or support is to be provided at any place outside of Europe. In consideration for CureVac's significant past investments and established Manufacturing Know How, technology and processes, BI shall pay to CureVac a one-off technology transfer fee in the amount of Five Million Euros (€ 5,000,000) to become due and payable within [*****] of the later of the first commercial sale by BI, a BI Affiliate or a Sublicensee of a Licensed Vaccine Manufactured by BI, a BI Affiliate or a Permitted Third Party CMO and the receipt by BI of an Invoice from CureVac.
- 6.6 Fill and Finish.** For Licensed Vaccines used for Commercialization by BI under this Agreement, CureVac and BI shall discuss in good faith the filling and finishing of CureVac Licensed Vaccines by either CureVac, BI, a BI Affiliate or a Third Party contract manufacturer with respect to the costs and quality of such filling and finishing. In case of quality issues at CureVac or if the Parties cannot reach agreement on prices for the filling and finishing of CureVac Licensed Vaccines, CureVac shall grant to BI a non-exclusive, royalty-free license, with the right to grant sub-licenses to Affiliates and to engage a Third Party contract manufacturer, under the CureVac Licensed Manufacturing Intellectual Property solely to the extent required for filling and finishing Licensed Vaccines intended for such Commercialization purposes.
- 6.7 CureVac's License to Manufacture.** For the term during which CureVac Manufactures the Licensed Vaccines under this Agreement and the Clinical Supply Agreement and the Related Agreements to be concluded in accordance with Section 6.2, BI shall grant and hereby grants to CureVac a non-exclusive license to any Intellectual Property Controlled by BI and its Affiliates (including any BI Collaboration Intellectual Property but excluding any Intellectual Property related to the BI pDNA Process and generated under a Related Agreement specific to such pDNA Process) solely to the extent required for CureVac to Manufacture the Licensed Vaccines.

7. CONSIDERATION.

7.1 Upfront Payment. In consideration for the exclusive licenses granted hereunder, BI shall pay to CureVac a non-refundable and non-creditable fee in the amount of Thirty Million Euros (€ 30,000,000) within thirty (30) days after BI's receipt of an Invoice of the respective amount from CureVac; *provided* that such amount shall not become payable until such time as BI has received a duly signed original of the Agreement from CureVac.

7.2 Option Fee. In consideration for the exclusive option granted hereunder, BI shall pay to CureVac a non-refundable and non-creditable option fee in the amount of Five Million Euros (€ 5,000,000) within thirty (30) days after BI's receipt of an Invoice of the respective amount from CureVac; *provided* that such amount shall not become payable until such time as BI has received a duly signed original of the Agreement from CureVac.

7.3 Development and Regulatory Milestone Payments. In addition to the payments under Sections 7.1 and 7.2, in further consideration for the exclusive licenses granted hereunder, and subject to the terms and conditions set forth in this Agreement, BI shall make the following Development and regulatory milestone payments to CureVac:

7.3.1 Development and Regulatory Milestone Payments for the First Indication (on the Effective Date expected to be Lung Cancer):

- (a) [*****]
- (b) [*****]
- (c) [*****]
- (d) [*****]

- (e) For regulatory milestones see table below:

[*****]

Provided, however, that if BI suspends the Development of the Afatinib Vaccine and/or the Chemo-Radiation Vaccine and replaces such TPP by another TPP (e.g., the combination of a Licensed Vaccine with a checkpoint inhibitor and/or a co-stimulatory molecule, a "**Checkpoint Inhibitor Vaccine**"), the applicable above milestone payments under (a) to (e) shall be payable for the other TPP replacing the Afatinib Vaccine and/or the Chemo-Radiation Vaccine. For the avoidance of doubt, milestone payments already paid for the Development of a TPP prior to suspension shall not be payable for the other TPP replacing the Afatinib Vaccine and/or the Chemo-Radiation Vaccine.

7.3.2 Development and Regulatory Milestone Payments for the Second and Third Indications:

In the event a Licensed Vaccine or Licensed Product is Developed in a second or third indication (e.g., head and neck cancer and/or cervical cancer) BI shall make the following Development and regulatory milestone payments for the first Licensed Vaccine reaching the respective milestones in the second indication and for the first Licensed Vaccine reaching the respective milestones in the third indication:

- (a) [*****]

- (b) [*****]

- (c) For regulatory milestones for the second and third indications see below:

[*****]

"**Initiation**" of a Clinical Trial for purposes of this Article 7 shall mean dosing of the first patient in such Clinical Trial; and "**continuation**" shall mean the final decision of a BI steering committee (International Development Committee, the International Medical Committee or an equivalent body of BI) to continue a Phase I/II Clinical Trial, a Phase II/III Clinical Trial or a Phase I through Phase III seamless design Clinical Trial. The competent steering committee shall use Commercially Reasonable Efforts to make such final decision in a timely manner and to inform CureVac on the achievement of milestones.

If any one of the milestone events under Section 7.3.1 and 7.3.2 is not required for the Development of a Licensed Vaccine or Licensed Product, such milestone payment shall become payable upon achieving the respective milestone event following the milestone event which was not required, i.e., upon the achievement of such following milestone event two milestone payments become payable hereunder. For clarity, the achievement of an Afatinib Vaccine-related milestone event does not trigger payment of a Chemo-Radiation- related milestone payment, and the achievement of a Chemo-Radiation-related milestone event does not trigger payment of an Afatinib Vaccine-related milestone payment. Further, the achievement of a regulatory milestone event for a certain territory (e.g., the EU) does not trigger payment of a regulatory milestone payment for a different territory (e.g., the USA). Each Development and regulatory milestone payment under Section 7.3.1 and Section 7.3.2 for each indication set forth above is payable only upon first achievement of such milestone for the first Licensed Vaccine or Licensed Product, and no further payments are due for repeated achievements of such milestones for such indication. For purposes of clarity, the maximum aggregate amount payable by BI pursuant to this Section 7.3 is [*****].

7.4 Sales Milestone Payments.

In addition to the upfront and milestone payments specified in Sections 7.1 to 7.3 above, in further consideration for the exclusive licenses granted by CureVac to BI hereunder; and subject to the terms and conditions set forth in this Agreement, BI shall make the following one-off, sales based milestone payments:

- (a) If aggregated annual worldwide Net Sales exceed for the first time [*****]:
[*****]
- (b) if aggregated annual worldwide Net Sales exceed for the first time [*****]:
[*****];
- (c) if aggregated annual worldwide Net Sales exceed for the first time [*****]:
[*****]; and
- (d) if aggregated annual worldwide Net Sales exceed for the first time [*****]:
[*****].

For purposes of clarity, the maximum aggregate amount payable by BI pursuant to this Section 7.4 is [*****].

- 7.5 Obligation to Inform.** BI shall inform CureVac on the occurrence of a milestone event under Sections 7.3 and 7.4 as soon as possible but in any event within [*****] after the occurrence thereof.
- 7.6 Milestone Payment Terms.** Each milestone payment shall be due and payable within [*****] after the receipt of the respective Invoice by BI. Notwithstanding the foregoing, each sales milestone payment shall be paid together with the royalty payments of the Calendar Quarter during which the respective milestone has been achieved.
- 7.7 Non-Refundable Payments.** All payments to be made by BI to CureVac under Sections 7.1 to 7.4 hereof are non-refundable upon expiry or termination of this Agreement for any reason. None of the payments to be made by BI to CureVac under Sections 7.1 to 7.4 may be credited against any of BI's royalty obligations under Section 7.8 hereof.
- 7.8 Royalties.**
- 7.8.1 Royalty Rates.** As further consideration for the rights and licenses granted by CureVac to BI under this Agreement, BI shall pay or cause payment of royalties to CureVac in an amount equal to [*****] of Net Sales of the Licensed Products.
- 7.8.2 Royalty Calculation.** The royalties shall be calculated on the basis of Net Sales, which shall be calculated on a Licensed Product-by-Licensed Product and country-by-country basis from First Commercial Sale until the expiration of the applicable Royalty Term.
- 7.8.3 Royalty Term.** BI's obligation to pay royalties shall begin, on a country-by-country basis, with the First Commercial Sale, and expire, on a country-by-country and Licensed Product-by-Licensed Product basis, upon the later of (i) expiry of the last to expire Valid Claim in such country; (ii) expiry of regulatory exclusivity for the respective Licensed Product in such country, provided, however, that no Generic Competition exists for such Licensed Product in such country or BI does not enforce existing regulatory exclusivity to enjoin Generic Competition despite preponderant chances of success of such action; or (iii) twelve (12) years from the date of First Commercial Sale of the respective Licensed Product (each a "**Royalty Term**"), provided, however, with respect to any country other than the Major Market Countries the Royalty Term shall expire on a Licensed Product-by-Licensed Product basis in such country at the latest fifteen (15) years from the date of First Commercial Sale of the respective Licensed Product in any country other than the Major Market Countries.

- 7.8.4 **Third Party Royalties Offset.** In the event that BI, after consultation with CureVac, reasonably determines that, in order to have freedom to operate in practicing the CureVac Licensed Intellectual Property in accordance with this Agreement in any country, BI is required to make royalty payments to one or more Third Party Licensors to obtain a license under their Patent Rights, then royalties due to CureVac for the respective Licensed Product in the respective country under this Section 7.8 shall be reduced by [*****] of the amount of such Third Party Licensor payments. Notwithstanding the foregoing, such reductions shall in no event reduce the royalty payable for such Licensed Product to less than [*****] of Net Sales in such country. For clarity, the provisions of this Section 7.8.4 shall not apply with respect to the license agreements referred to in Exhibit 4.5B.
- 7.8.5 **Countries without Patent Protection; Generic Competition.** In countries (a) where (i) sales of Licensed Product do not or no longer fall under any Valid Claim and (ii) regulatory exclusivity for the Licensed Product has expired, or (b) where the Licensed Product is experiencing Generic Competition (except where (x) BI has the primary right in accordance with Section 9.6.2 of this Agreement to bring a patent infringement action to enjoin such Generic Competition and, despite preponderant chances of success of such infringement action, notifies CureVac that BI will not take action or bring suit to prosecute such infringement; or (y) BI does not enforce existing regulatory exclusivity to enjoin such Generic Competition despite preponderant chances of success of such action), royalties set forth above shall be reduced by [*****]. Should BI obtain evidence that any of the above requirements for such royalty reduction were met during a Calendar Quarter after BI has completed preparing its Net Sales report for such Calendar Quarter, BI shall be entitled to a credit, to be applied by BI against subsequent royalty payments, in the amount by which royalties would have been reduced had due account been taken of such royalty reduction when preparing such Net Sales report. If royalties are subject to the reductions under both Section 7.8.4 and 7.8.5, the reduction under Section 7.8.4 shall be applied before the reduction under Section 7.8.5.
- 7.8.6 **Blended Royalties.** With respect to a potential step down in royalty rates to account for the expiry of certain Patent Rights, the Parties acknowledge and agree that the CureVac Licensed Intellectual Property licensed under this Agreement may justify royalty rates and/or royalty terms of differing amounts for sales of Licensed Products in the Territory, which rates could be applied separately to Licensed Products involving the exercise of CureVac Licensed Patent Rights in the Territory and/or the incorporation of Know How comprised in the CureVac Licensed Intellectual Property, and that if such royalties were calculated separately, royalties relating to the CureVac Licensed Patent Rights in the Territory and royalties relating to the Know How comprised in the CureVac Licensed Intellectual Property would last for different terms. For practicality reasons the Parties have agreed on a blended royalty rate. For clarity, this Section 7.8.6 (i) solely explains the rationale behind the royalty rates agreed on by the Parties and (ii) does not modify any of the other provisions of this Agreement.

7.8.7 **No Multiple Royalties.** No multiple royalties shall be payable because a Licensed Product, its manufacture, use or sale is or shall be covered by (i) more than one Valid Claim and/or (ii) more than one patent under the Patent Rights which form part of the CureVac Background Intellectual Property and/or the CV9202 Specific Patent Rights.

7.8.8 **Net Sales Adjustments Related to Combination Products and Co-Packaged Products.** In the event a Licensed Product is sold as a Combination Product or Co-Packaged Product, Net Sales of the Combination Product or Co-Packaged Product will be calculated, on a country-by-country basis, as follows:

If the Licensed Product and the other product are also sold separately in the applicable country, Net Sales of the Licensed Product portion of Combination Products and Co-Packaged Products will be calculated by multiplying the total Net Sales of the Combination Product or Co-Packaged Product by the fraction $A/(A+B)$, where A is the average gross selling price in the applicable country of the Licensed Product sold separately in the same formulation and dosage, and B is the sum of the average gross selling prices in the applicable country of all other therapeutically or prophylactically active ingredients or products in the Combination Product or Co-Packaged Product sold separately in the same formulation and dosage, during the applicable Calendar Quarter.

If the Licensed Product is sold separately, but the average gross selling price of the other product(s) cannot be determined, Net Sales of the Combination Product or the Co-Packaged Product shall be equal to the Net Sales of the Combination Product or Co-Packaged Product multiplied by the fraction A/C wherein A is the average gross selling price of the Licensed Product and C is the average gross selling price of the Combination Product or Co-Packaged Product.

If the other product(s) is/are sold separately, but the average gross selling price of the Licensed Product cannot be determined, Net Sales of the Combination Product and/or Co-Packaged Product shall be equal to the Net Sales of the Combination Product and/or Co-Packaged Product multiplied by the following formula: one (1) minus B/C wherein B is the average gross selling price of the other product(s) and C is the average gross selling price of the Combination Product and/or Co-Packaged Product.

If the average gross selling price of neither the Licensed Product nor the other product(s) can be determined, Net Sales of the Combination Product or Co-Packaged Product shall be equal to Net Sales of the Combination Product or Co-Packaged Product multiplied by a mutually agreed percentage.

The average gross selling price for such other product(s) contained in the Combination Product or Co-Packaged Product shall be calculated for each calendar year by dividing the sales amount by the units of such other product(s), as published by IMS or another mutually agreed independent source. In the initial calendar year during which a Combination Product or Co-Packaged Product is sold, forecasted average gross selling prices shall be used for royalty calculation purposes. Any over or under payment due to a difference between forecasted and actual average gross selling prices shall be paid or credited in the second royalty payment of the following calendar year. In the following calendar year the average gross selling price of the previous year shall apply from the second royalty payment on.

- 7.8.9 Royalty Payments.** Within [*****] after the end of each Calendar Quarter in which any Net Sales occur, BI shall calculate the royalty payments owed to CureVac and shall remit to CureVac the amount owed to CureVac. All royalty payments shall be computed by converting the Net Sales in each country in the Territory into the currency of Euros, using the monthly exchange rates as customarily used by BI in its regular accounting system (momentarily average rates published by the European Central Bank in Frankfurt/Main, Germany).
- 7.8.10 Reports.** Each royalty payment shall be accompanied by a written report describing the Net Sales of each Licensed Product sold by or on behalf of BI, its Affiliates and Sublicensees during the applicable Calendar Quarter for each country in which sales of any Licensed Product occurred, specifying: the gross sales (if available) and Net Sales in each country's currency, including an accounting of deductions taken in the calculation of Net Sales; the applicable exchange rate to convert from each country's currency to Euros; and the royalties payable in Euros.
- 7.8.11 Records.** BI, its Affiliates and/or its Sublicensees shall keep and maintain records of sales of the Licensed Product(s) so that the royalties payable and the royalty reports may be verified. Such records shall be open to inspection during business hours for a [*****] period after the Calendar Quarter to which such records relate, but in any event not more than once per calendar year, by a nationally recognized independent certified public accountant selected by CureVac to whom BI has no reasonable objections and retained at CureVac's expense. Said accountant shall sign a confidentiality agreement prepared by BI and reasonably acceptable to CureVac and shall then have the right to examine the records kept pursuant to this Agreement and report to CureVac the findings (but not the underlying data) of said examination of records as necessary to evidence that the records were or were not maintained and used in accordance with this Agreement. CureVac shall ensure that a copy of any report provided to CureVac by the accountant is given concurrently to BI. If said examination of records reveals any underpayment(s) of the royalty payable, then BI shall promptly pay the balance due to CureVac, and if the underpayment(s) is/are more than 5%, then BI shall also bear the expenses of said accountant. If said examination of records reveals any overpayment(s) of royalty payable, then CureVac shall credit the amount overpaid against BI's future royalty payment(s).

7.9 Payment Terms.

7.9.1 All payments by BI to CureVac shall be made by wire transfer payment, and shall be remitted to the following bank account:

[*****]

Invoices shall be sent to BI at the following address: Boehringer Ingelheim International GmbH [*****]

Quote the BI in-house contact person in a corresponding reference field or anywhere on the invoice/credit note outside of the address field:

Contact: [*****]

7.9.2 Payments not paid within five (5) days after the due date under this Agreement shall bear interest at an annual rate of three percent (3%) above the three-month-LIBOR rate of the respective currency for the time period in which such amount is outstanding, as disclosed from time to time by the European Central Bank which applied on the due date. Calculation of interest will be made for the exact number of days in the interest period based on a year of 360 days (actual/360) by BI.

7.10 Taxes.

7.10.1 All payments under or in connection with this Agreement shall be inclusive of any income taxes and each Party shall be responsible for its own income taxes assessed by a tax or other authority except as otherwise set forth in this Agreement.

7.10.2 If applicable laws require withholding of BI of any taxes imposed upon CureVac on account of any royalties and payments, paid under this Agreement, such taxes shall be deducted by BI as required by law from such remittable royalty and payment and shall be paid by BI to the proper tax authorities. Official receipts of payment of any withholding tax shall be secured and sent to CureVac as evidence of such payment. The Parties shall exercise their best efforts to ensure that any withholding taxes imposed are reduced as far as possible under the provisions of any relevant tax treaty, and BI shall forward any refund payments to CureVac without undue delay, *provided, however*, in the event BI transferred its domicile outside of Germany, BI shall bear the risk and compensate CureVac for such withholding tax not being partly or fully refunded, and if CureVac transfers its domicile outside of Germany, CureVac shall bear the risk of such withholding tax not being partly or fully refunded.

7.10.3 All payments due to the terms of this Agreement are expressed to be exclusive of value added tax (VAT) or similar indirect taxes (e.g., Goods and Service tax). VAT/indirect taxes shall be added to the payments due to the terms if legally applicable.

8. JOINT STEERING COMMITTEE AND JOINT PROJECT TEAM.

8.1 Formation of the JSC. The Parties shall form a Joint Steering Committee (the "**Joint Steering Committee**" or "**JSC**"), which shall monitor the Development of the Licensed Vaccines as described in more detail in Section 8.3 below. Each Party shall be equally represented on the Joint Steering Committee with an equal number of participants. The Joint Steering Committee shall be comprised of at least six (6) professionally and technically qualified representatives, three (3) from each Party. The Joint Steering Committee shall meet for the first time within six (6) weeks after the Effective Date and thereafter at least once a Calendar Quarter, with additional meetings to be held as the Parties deem necessary or in case a situation occurs in which a decision by the JSC is required, within [*****] after written request for such meeting by either Party. BI shall designate the chairperson of the JSC. The meeting place shall alternate between the offices of BI in [*****] and the offices of CureVac in [*****] or as otherwise decided by the JSC. JSC meetings may be conducted in person, by telephone or videoconference as agreed between the Parties, *provided, however*, that at least twice a year the JSC meeting shall be held in person. Each Party shall provide the other Party with written notice of its representatives for the JSC within [*****] after the Effective Date of this Agreement and, thereafter, immediately upon replacement, *provided, however*, that the Parties shall use Commercially Reasonable Efforts to ensure continuity on the JSC. Each Party may invite guests to the meetings, in order to discuss special technical or commercial topics relevant to the applicable agenda, *provided, however*, such guests are bound by confidentiality obligations corresponding to Sections 4.3 and 10. Prior to each meeting of the JSC each Party will make available to the other Party written copies of Development Data regarding the Development and other information relating to its respective activities and timelines. Furthermore, the Parties shall inform each other in writing at least [*****] prior to each JSC meeting of any event which could result in a material deviation from the activities and timelines set forth in the Development Plans.

8.2 Decision Making in the JSC. The JSC shall have the right to adopt such standing rules as shall be necessary for its work, to the extent that such rules are not inconsistent with this Agreement. A quorum of the JSC shall exist whenever at least one representative appointed by each Party is present. The representatives from each Party may give proxy to the other representatives from such Party. The representatives from each Party will collectively have one vote in decisions of the JSC, with decisions of the JSC made by unanimous vote at a meeting at which a quorum exists.

8.3 Responsibilities of the JSC. The Parties shall be jointly responsible for directing the activities of the JSC, which activities shall include but not be limited to

- (a) the review, validation, material modification, update and amendment of the Development Plans;
- (b) the monitoring of the Development activities under the Development Plans;
- (c) the exchange of Development Data and other technical information;

- (d) the resolution of any disputes within the Joint Project Team; and
- (e) the coordination of patents and other intellectual property rights applications regarding Joint Inventions.

For the avoidance of doubt, the JSC is not permitted to change any terms of this Agreement.

- 8.4 Minutes.** The JSC shall keep accurate and complete minutes of its meetings. The chairperson for each meeting shall be responsible for taking such minutes and distributing them to CureVac for its review and comment within two (2) weeks after the date of each meeting, and within one (1) week after the receipt thereof, CureVac shall remit such minutes back to the chairperson with its comments, if any. The Parties shall in good faith attempt as quickly as is reasonably possible to resolve any disputes as to the content of such minutes so as to have a final agreed version as quickly as is reasonably possible.
- 8.5 Decision Making Authority.** All decisions of the JSC shall be made in good faith in the best interest of this Agreement and the Parties shall use their Commercially Reasonable Efforts to take decisions unanimously. In the event that the JSC is unable to agree on any matter after good faith attempts to resolve such disagreement in a commercially reasonable fashion, then either Party may refer the disagreement to a personal face-to-face meeting between the board member representing RD&M or his/her nominated designee of BI and the CEO or CCO of CureVac, and each Party shall ensure that such meeting takes place within [*****] after the date of the relevant referral. If the board member representing RD&M or his/her nominated designee of BI and the CEO or CCO of CureVac cannot resolve such disagreement in a mutually acceptable manner within a further [*****] period after such personal face-to-face meeting, then the vote of BI with appropriate consideration of the interests of CureVac shall be decisive regarding Development and Commercialization, except in the event the disputed topic would result in (a) a substantial reduction of BI's diligence obligations under Section 4.2 hereof; (b) a delay of the Non-clinical and Clinical Development of more than [*****]; (c) a substantial change regarding the Manufacture of the Licensed Vaccines; (d) less FTE support of CureVac or an increase in FTE support of CureVac by more than [*****]; (e) the evaluation of the outcome of the ongoing feasibility study as referenced in Section 6.3.1(b) above; or (f) the evaluation of the outcome of the feasibility study with respect to the BI pDNA Process as referenced in Section 6.4 above. If BI casts its decisive vote in relation to a CMC Development matter, BI shall pay to CureVac compensation at the FTE Rates for any CureVac FTEs needed for the additional CMC Development activities demanded by BI (if any) and reimburse CureVac for any reasonable out of pocket costs incurred by CureVac in relation to such additional CMC Development activities. For the avoidance of doubt, the FTE resource commitments in the Development Plans, as set forth in Section 4.1.1 above, can only be reduced by the Parties and are not subject to the decision making process in the JSC.

- 8.6 Expert Panel Resolution.** In the event that the Parties are unable to reach an agreement on any of the issues under Section 8.5 (a) to (e) or on any Manufacturing matter within [*****] after the personal face-to-face meeting between the board member representing RD&M or his/her nominated designee of BI and the CEO or CCO of CureVac, either Party is entitled to request that the question be referred to a panel of three (3) independent experts in the Development of biologic products for the treatment of cancer in humans and on the specific issue at dispute ("**Expert Panel**"). Such request shall be made by written notice explicitly referring to this Section 8.6. Each Party shall nominate within [*****] of the request one expert, while the third expert shall be mutually agreed by the Parties within another [*****]. If a Party does not nominate the one expert within such first [*****] such expert shall be nominated by the respective other Party. If the Parties are unable to agree on the third expert, the third expert shall be selected and nominated by the two experts appointed by the Parties. Each Party shall submit to the Expert Panel a written report setting forth its proposed resolution of such dispute within the later of (i) [*****] following a referral to the panel, or (ii) [*****] after selection of such Expert Panel. The Expert Panel shall meet face-to-face to discuss the written reports and shall be entitled, at its discretion to invite for a hearing representatives of the Parties. The Expert Panel shall then select as its decision one of the proposals from the Parties, and shall not have the authority to render any substantive decision other than the proposal of either BI or CureVac. The decision of the Expert Panel shall be final and binding on the Parties and the Party whose proposal has not been selected by the Expert Panel will pay all costs of the Expert Panel.
- 8.7 Joint Project Team.** In addition to the JSC, the Parties shall jointly, unless otherwise mutually agreed, agree on and establish a project team ("**Joint Project Team**"), which shall be comprised of experts from the development disciplines of the Parties and which shall oversee and bring forward the Development. BI will have the lead of the Joint Project Team. The Joint Project Team shall meet regularly, but at least once per Calendar Quarter. Meetings of the Joint Project Team may be conducted in person, by telephone or videoconference as agreed between the Parties. Each Party shall provide the other Party with written notice of its representatives for the Joint Project Team within [*****] after the Effective Date of this Agreement and, thereafter, immediately upon replacement. Each Party may invite guests to the meetings, in order to discuss special technical or commercial topics relevant to the applicable agenda, *provided, however*, such guests are bound by confidentiality obligations corresponding to Sections 4.3 and 10. All decisions of the Joint Project Team shall be by unanimous agreement and any dispute within the Joint Project Team which cannot be resolved within four weeks will be brought to the attention of and for decision within the JSC.
- 9. INTELLECTUAL PROPERTY.**
- 9.1 Ownership of Background Intellectual Property.** BI retains all rights to the BI Background Intellectual Property, and CureVac retains all rights to the CureVac Background Intellectual Property, subject only to the licenses granted hereunder and the assignment and transfer of the CV9202 Specific Patent Rights to BI under Section 9.4 below.

9.2 Ownership of Collaboration Intellectual Property.

- 9.2.1 For any invention comprised within Collaboration Intellectual Property, CureVac and BI will inform each other and determine in good faith whether it is
- (a) either (i) dependent upon or covered by the BI Background Intellectual Property, and (x) neither dependent upon nor covered by the CureVac Background Intellectual Property and (y) not applicable to the CMC Development and/or Manufacture of the Licensed Vaccine or the manufacture of any other RNA-based product owned or in-licensed by CureVac; or (ii) solely directed to the composition of matter, the formulation or use of the Licensed Vaccine, i.e., not applicable to any other vaccine, compound or product, and not applicable to the Manufacture of the Licensed Vaccine or the manufacture of any other RNA-based product owned or in-licensed by CureVac, in which event such invention shall be solely owned by BI and shall be considered BI Collaboration Intellectual Property, irrespective as to which Party generated such Collaboration Intellectual Property. For the avoidance of doubt, any invention comprised within Collaboration Intellectual Property that is solely directed to the CV9202 Specific Patent Rights shall be solely owned by BI and shall be considered BI Collaboration Intellectual Property;
 - (b) (i) dependent upon or covered by the CureVac Background Intellectual Property, and neither dependent upon nor covered by the BI Background Intellectual Property nor directed to the composition of matter, the formulation or use of the Licensed Vaccine or the CV9202 Specific Patent Rights; or (ii) directed to the CMC Development (except any invention that is solely directed to the composition of matter, the formulation or use of the Licensed Vaccines) and/or Manufacture of the Licensed Vaccines or the manufacture of any other RNA-based product owned or in-licensed by CureVac, in which event such invention shall be solely owned by CureVac and shall be considered CureVac Collaboration Intellectual Property, irrespective as to which Party generated such Collaboration Intellectual Property;
 - (c) either (i) relates to both: (x) the composition of matter, the formulation or use of the Licensed Vaccine; and (y) any other CureVac Background Intellectual Property or any other vaccine, compound or product owned or in-licensed by CureVac; or (ii) relates to both: (xx) the BI Background Intellectual Property; and (yy) any other CureVac Background Intellectual Property or to the CMC Development (except any invention that is solely directed to the composition of matter, the formulation or use of the Licensed Vaccines) or Manufacture of the Licensed Vaccines or to the manufacture of any other RNA-based product owned or in-licensed by CureVac; in which event, the Parties shall discuss in good faith whether any such invention can be divided and owned in accordance with Sections (a) and (b) above, made subject to separate patent filings to be assigned accordingly; and if no such division is possible, such Collaboration Intellectual Property shall be treated as provided under Section 9.2.2.

9.2.2 Any Collaboration Intellectual Property which is neither solely owned by BI nor solely owned by CureVac shall be jointly owned by the Parties ("**Joint Collaboration Intellectual Property**"). Any invention within the Joint Collaboration Intellectual Property shall be a "**Joint Invention**" and any Patent Right filed with respect to such Joint Invention shall be a "**Joint Patent Right**". For the avoidance of doubt, CureVac's share in Joint Collaboration Intellectual Property which falls within the scope of BI's licenses under Sections 2.1 and/or 2.2, shall be automatically included within such license(s), on the terms and conditions contained in this Agreement.

9.3 Assignment and transfer of Collaboration Intellectual Property.

9.3.1 **Assignment and Transfer.** The initial holder of Collaboration Intellectual Property which is to be wholly or jointly owned by the other Party in accordance with Section 9.2 above shall assign and transfer, and hereby assigns and transfers, to such other Party all or a 50 percent share, as the case may be, of its present and future rights, interest and title to any such Collaboration Intellectual Property, and the other Party shall accept and hereby accepts such assignment and transfer. At the written instruction and, if the transferring Party incurs out-of-pocket costs, at the expense of the other Party, the transferring Party agrees to make or procure all such assignments from its employees, consultants and subcontractors as are necessary to give effect to this provision and to assist the transferee in every way reasonably required by the transferee (i) to obtain Patent Rights to such Collaboration Intellectual Property in any and all countries for which Patent Rights are being sought, and to (ii) maintain and defend Patent Rights in all Collaboration Intellectual Property which have been or may be assigned as provided above. At the expense (solely for out-of-pocket costs incurred) of the other Party, the transferring Party shall execute and deliver all such documents, instruments and other papers and take all such other action which the transferee may reasonably request in order to effect the provisions of this Section 9.3.

9.3.2 **Back license to CureVac.** BI hereby grants to CureVac, and CureVac hereby accepts, a cost-free, fully-paid, irrevocable, perpetual, sublicensable in multiple tiers and transferable license to use the Collaboration Intellectual Property assigned and transferred hereunder from CureVac to BI for the Manufacture of the Licensed Vaccine, the exploitation of any product other than a Licensed Vaccine or Licensed Product and/or for any use outside the Field. Such license shall be exclusive with regard to the Collaboration Intellectual Property described in Section 9.2.1(a)(ii) and non-exclusive with regard to the Collaboration Intellectual Property described in Section 9.2.1(a)(i) above.

9.3.3 **Back license to BI.** CureVac hereby grants to BI, and BI hereby accepts, a cost-free, fully- paid, non-exclusive, irrevocable, perpetual, sublicensable in multiple tiers and transferable license to use the Collaboration Intellectual Property assigned and transferred hereunder from BI to CureVac for the exploitation outside the scope of this Agreement.

9.3.4 **Exploitation of joint inventions and results.** Each Party may exploit any Joint Collaboration Intellectual Property in any and all fields (except, in the case of BI, for the CMC Development or Manufacture of the Licensed Vaccines or the manufacture of any other mRNA-based product), on a non-exclusive, cost-free basis, and with no accounting or obligation to the other, and each Party hereby grants to the other Party, and the other Party hereby accepts, a non-exclusive, cost-free, perpetual, irrevocable and worldwide license (in case of CureVac with the right to transfer and sublicense in multiple tiers and in case of BI with the right to sublicense in accordance with Section 2.2 above) to the other Party's share in such Joint Collaboration Intellectual Property, subject to the licenses granted hereunder.

9.4 Assignment and Transfer of CV9202 Specific Patent Rights.

- 9.4.1 Upon [*****], CureVac shall assign and transfer to BI the CV9202 Specific Patent Rights. Upon such assignment, the CV9202 Specific Patent Rights shall no longer be included in the definition of CureVac Background Intellectual Property. In order to effect the assignment and transfer, CureVac will support BI, upon BI's request in executing all assignment documentation and providing any declaration which may be necessary to effect the assignment and transfer of the CV9202 Specific Patent Rights from CureVac to BL BI shall be responsible for, and will pay all out-of-pocket expenses with respect to the assignment and transfer of the CV9202 Specific Patent Rights, including the fees for notarization and legalization of the assignment documents, and for recording such assignment documents with the competent patent offices.
- 9.4.2 As of the assignment and transfer of the CV9202 Specific Patent Rights, BI shall use its best efforts to prosecute, maintain and defend the CV9202 Specific Patent Rights in at least all Major Market Countries, shall keep CureVac informed of all such prosecution, maintenance and defense efforts, and shall give CureVac reasonable opportunity to review and comment on such prosecution, maintenance and defense. BI shall not unreasonably refuse to address any of CureVac's comments made in accordance with this Section 9.4.2.
- 9.4.3 BI hereby grants to CureVac, and CureVac hereby accepts, an exclusive, irrevocable, perpetual, cost-free, sublicensable in multiple tiers and transferable license to use the CV9202 Specific Patent Rights for the Manufacture of the Licensed Vaccines, the exploitation of any product other than a Licensed Vaccine or Licensed Product and/or for any use outside the Field.

9.5 Management of CureVac Licensed Patent Rights.

- 9.5.1 **Filing and Prosecution of CureVac Licensed Patent Rights.** During the term of this Agreement, and subject to Sections 9.5.2 and 9.5.5 below, CureVac shall be responsible for preparing and filing the CureVac Licensed Patent Rights, and prosecuting, maintaining and defending, throughout the Territory, all of the CureVac Licensed Patent Rights and, upon BI's request, shall keep BI advised of the status of prosecution of all such patent applications included within the CureVac Licensed Patent Rights, and shall give BI before filing or response to office actions, as applicable, reasonable opportunity to review and comment upon the text of any applications or amendments for CureVac Licensed Patent Rights. CureVac shall not unreasonably refuse to address any of BI's comments made in accordance with this Section 9.5.1.

- 9.5.2 **Filing and Prosecution of Joint Patent Rights.** BI shall have the right, but not the obligation, of preparing, filing, prosecuting, maintaining and defending Joint Patent Rights anywhere in the Territory. At the latest [*****] before filing, the prosecuting Party shall give the non-prosecuting Party an opportunity to review and comment upon the text of any application with respect to such Joint Patent Right, shall consult with the non-prosecuting Party with respect thereto, shall not unreasonably refuse to address any of the non-prosecuting Party's comments and supply the non-prosecuting Party with a copy of the application as filed, together with notice of its filing date and serial number. The prosecuting Party shall keep the non-prosecuting Party reasonably informed of the status of the actual and prospective prosecution, maintenance and defense, including but not limited to any substantive communications with the competent patent offices that may affect the scope of such filings, and the prosecuting Party shall give the non-prosecuting Party a timely, prior opportunity to review and comment upon any such substantive communication and shall consult with such non-prosecuting Party with respect thereto, and shall not unreasonably refuse to address any of such non-prosecuting Party's comments.
- 9.5.3 **Assigned Patent Rights.** Upon assignment, BI shall have the right but not the obligation, of preparing, filing, prosecuting, maintaining and defending Patent Rights within the Collaboration Intellectual Property assigned and transferred, wholly or in part, as the case may be, by CureVac to BI in accordance with Section 9.3 (the "**Assigned Patent Rights**"), anywhere in the Territory, and shall keep CureVac advised of the status of prosecution of all such Patent Rights, and shall give CureVac before filing or response to office actions, as applicable, reasonable opportunity to review and comment upon the text of any applications or amendments or other substantive actions for such Patent Rights. BI shall not unreasonably refuse to address any of CureVac's comments made in accordance with this Section 9.5.3.
- 9.5.4 **Costs.** The costs of filing, prosecuting, maintaining and defense of the CureVac Licensed Patent Rights under Section 9.5.1 and 9.5.2 shall be borne by the Party responsible for such filing, prosecution, maintenance and defense, except for and subject to such Party's right to elect to discontinue the patent prosecution and maintenance as set forth in Section 9.5.5 below.
- 9.5.5 **Abandonment of Patent Rights.** If CureVac elects to cease the filing, prosecution, maintenance and/or defense of a CureVac Licensed Patent Right or if BI elects not to participate in filing of a patent application on a Joint Invention or to cease the prosecution, maintenance or defense of any Joint Patent Right, a CV9202 Specific Patent Right or an Assigned Patent Right in any country of the Territory, such Party shall provide the other Party with written notice immediately upon the decision to abandon the filing, prosecution, maintenance and/or defense of such CureVac Licensed Patent Right, Joint Patent Right, CV9202 Specific Patent Right or Assigned Patent Right, as the case may be, in any event, however, not later than [*****] before any relevant deadline relating to or any public disclosure of the relevant Patent Rights. In such event, the abandoning Party shall permit the other Party, at such other Party's sole discretion, to take over or continue, as the case may be, the filing, prosecution, maintenance and defense of such Patent Right on behalf of and in the name of the owner of such Patent Right and at such other Party's own expense. If the abandoning Party was also the prosecuting Party and if the other Party elects to take over and continue such filing, prosecution, maintenance and defense, the abandoning Party shall execute such documents and perform such acts, at the expense of the Party taking over prosecution, as may be reasonably necessary to permit such Party to take over and continue the filing, prosecution, maintenance and/or defense of such Patent Right on behalf and in the name of the respective owner or co-owners of such Patent Right and at its own expense. For the avoidance of doubt, the abandoning Party shall remain an owner or co-owner of the abandoned Patent Right but has no further say in the filing, prosecution, maintenance and defense of the Patent Right, provided, however, that the prosecuting Party shall timely inform such abandoning Party if it is decided to finally abandon the respective Patent Right, in which event the other Party shall have the right to assume sole responsibility for ongoing prosecution, maintenance and defense of such Patent Right in accordance with this Section 9.5.

9.6 Enforcement of CureVac Licensed Patent Rights, Joint Patent Rights, CV9202 Specific Patent Rights and Assigned Patent Rights.

- 9.6.1 If either BI or CureVac becomes aware of any infringement, anywhere in the world, of any issued CureVac Licensed Patent Right, Joint Patent Right, CV9202 Specific Patent Right or Assigned Patent Right, it will promptly notify the other Party in writing thereof.
- 9.6.2 CureVac shall have the primary right, but not the obligation, to take action to obtain a discontinuance of infringement or bring suit against a Third Party infringer of a CureVac Licensed Patent Right it is responsible for under Section 9.5.1. Upon assignment to BI under Section 9.4 of this Agreement, BI shall have the primary right to take action to obtain a discontinuance of infringement or bring suit against a Third Party infringer of CV9202 Specific Patent Rights or Assigned Patent Rights. The Party prosecuting and maintaining the Joint Patent Right shall have the primary right, but not the obligation, to take action to obtain a discontinuance of infringement or bring suit against a Third Party infringer of such Patent Right. The enforcing Party shall bear all expenses of such action or suit.
- 9.6.3 If the Party which has the primary right to bring an infringement action elects not to take action or to bring suit to prosecute such infringement, it shall notify the other Party of such election within [*****] after receipt of the notice of the infringement or after the election to stop any such suit. If after the expiration of the [*****] period (or, if earlier, the date upon which the Party which has the primary right to bring an infringement action provides written notice that it does not plan to bring such action), the Party which has the primary right to bring action has neither obtained a discontinuance of infringement of the CureVac Licensed Patent Right, the Joint Patent Right, the CV9202 Specific Patent Right or the Assigned Patent Right, as the case may be, nor filed suit against any such Third Party infringer of such Patent Rights, then the other Party shall have the right, but not the obligation, to take action or bring suit against such Third Party infringer of such Patent Rights, provided that such other Party shall bear all the expenses of such suit.

- 9.6.4 In any litigation brought by either Party pursuant to this Section 9.6, the enforcing Party shall notify the non-enforcing Party of the commencement of that litigation and shall have the right and standing to use and sue in the other Party's name. Notwithstanding the first sentence of this paragraph, irrespective of which Party brings the infringement action hereunder, (i) the Parties shall collaborate with respect to such action; (ii) the non-enforcing Party shall have the right, at its own expense, to be represented by independent counsel in any such litigation; and (iii) the Parties shall consult with each other regarding, and agree on strategic decisions and their implementation in connection with such action. The Party bringing the infringement action hereunder shall bear all the expenses of any suit brought by it claiming infringement of any CureVac Licensed Patent Right, Joint Patent Right, CV9202 Specific Patent Right or Assigned Patent Right.
- 9.6.5 Any recoveries obtained by either Party as a result of any proceeding against a Third Party infringer under this Section 9.6 shall be allocated as follows:
- (a) Such recovery shall first be used to reimburse each Party for all reasonable litigation costs in connection with such litigation incurred by that Party;
 - (b) such recovery shall then be used to compensate each Party for the respective damages suffered from the infringement of the respective Patent Right, provided that in the event the remaining portion of the recovery is not sufficient to compensate each Party's damages, such compensation shall be paid on a pro-rata share based on the respective damages suffered, *provided, however*, if such respective damages suffered cannot be reasonably ascertained, the recovery shall be equally shared between the Parties; **and**
 - (c) the remaining portion of such recovery, if any, shall be equally shared between CureVac and BI to the extent it relates to Licensed Vaccines and Licensed Products, and shall belong to the Party Controlling the respective Patent Right to the extent it does not relate to Licensed Vaccines and Licensed Products.
- 9.6.6 Neither Party shall settle any claim or demand in any such litigation that materially negatively impacts the other Party's rights or interests under this Agreement without the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed. In addition to the foregoing, to the extent any action initiated by BI involves any infringement of CureVac Licensed Patent Rights, Joint Patent Rights, the CV9202 Specific Patent Rights or the Assigned Patent Right and is reasonably likely to relate to CureVac's products and/or technologies other than a Licensed Vaccine, BI will consult with CureVac regarding issues relating to such CureVac Licensed Patent Rights, Joint Patent Rights, the CV9202 Specific Patent Rights or the Assigned Patent Rights, CureVac's products and technologies, and the Parties will mutually agree on strategic litigation decisions regarding such issues.
- 9.6.7 The non-enforcing Party shall provide such assistance as the enforcing Party shall reasonably request in connection with any action or suit hereunder to prevent or enjoin any such infringement or unauthorized use of an issued Patent Right within the CureVac Licensed Patent Rights, Joint Patent Rights, the CV9202 Specific Patent Rights or the Assigned Patent Rights, including agreeing to be joined as a party to such action or suit and executing legal documents as reasonably requested by the enforcing Party. Such assistance will be provided by a Party, at the enforcing Party's cost. The Parties agree that, irrespective of which Party brings the action or suit pursuant to this Section 9.6, the Parties will update each other as to the status of such actions through the JSC and the enforcing Party will not unreasonably reject comments from the other Party relating to the management of such litigation.

9.7 Infringement and Third Party Licenses.

- 9.7.1 If the Development and Commercialization or use of any Licensed Vaccine or Licensed Product in accordance with this Agreement is alleged by a Third Party to infringe a Third Party's Patent Right, or such allegation can be reasonably expected, the Party becoming aware of such allegation shall promptly notify the other Party. Additionally, if either Party determines that, based upon the review of a Third Party's Patent Right, it may be desirable to obtain a license from such Third Party with respect thereto, such Party shall promptly notify the other Party of such determination and the Parties shall consult with each other and attempt to agree on a common strategy to either obtain a reasonable license or otherwise. If BI reasonably determines that such license from a Third Party ("**Third Party Licensor**") is necessary in order to have freedom to operate in practicing the CureVac Licensed Intellectual Property in accordance with this Agreement in any country, then BI shall have the sole right, but not the obligation, to negotiate and obtain a license from such Third Party Licensor as necessary for BI, its Affiliates, and permitted Sublicensees to Non- clinically and Clinically Develop and Commercialize the Licensed Vaccines and Licensed Products in such country.
- 9.7.2 If a Third Party sues BI or CureVac or any of their Affiliates, distributors or permitted Sublicensees alleging that BI's practice of a right granted by CureVac to BI hereunder through the Development and Commercialization of any Licensed Vaccine or Licensed Product pursuant to this Agreement infringes or will infringe said Third Party's Intellectual Property, then, upon the defending Party's request and in connection with the defense of any such Third Party infringement suit, the non-defending Party shall provide reasonable assistance to the defending Party for such defense and/or shall join in any such action if required in order to defend such claim or to assert all available defenses and claims, and to cooperate reasonably with the defending Party.
- 9.7.3 The defending Party shall not enter into a settlement that imposes a financial obligation upon the non-defending Party or which limits the scope or invalidates any Patent Right of either Party without such Party's prior written consent, which consent shall not be unreasonably withheld or delayed, and in any settlement the defending Party shall always take into consideration the interest of the non-defending Party.

- 9.8 Patent Term Extension and Supplementary Protection Certificate.** The JSC shall decide on any patent term extensions, including supplementary protection certificates and any other extensions that are now or become available in the future, wherever applicable, in order to secure the optimal protection for the Licensed Vaccine available under Applicable Laws. The JSC shall not decide to extend a Patent Right that is not a CureVac Licensed Patent Right, Joint Patent Right, CV9202 Specific Patent Right or an Assigned Patent Right in any country or other jurisdiction, without CureVac's prior written consent which CureVac shall not unreasonably delay or withhold. The Party having the responsibility to prosecute the respective Patent Right shall have the sole obligation of applying for any extension or supplementary protection certificate with respect to a Licensed Vaccine and such Patent Right in the Territory, and such Party shall keep the other Party fully informed of its efforts to obtain such extension or supplementary protection certificate. The other Party shall provide prompt and reasonable assistance, as requested by the applying Party, including by taking such action as patent holder as is required under any Applicable Law to obtain such patent extension or supplementary protection certificate. BI shall pay all expenses in regard to obtaining and maintaining any extension or supplementary protection certificate in respect of the Licensed Vaccine in the Territory.
- 9.9 CREATE Act.** This Agreement includes a joint research agreement as defined in §§ 100(h) and 102(c) of title 35, United States Code as amended by the America Invents Act. If either Party intends to disqualify as prior art subject matter in a Patent Right within the Collaboration Intellectual Property that would otherwise qualify as prior art under 35 U.S.C. §102 (a)(2) with respect to a claimed invention in any such Patent Right pursuant to the provisions of 35 U.S.C. §102(c), such Party shall first obtain the prior written consent of the other Party (including the terms and conditions under which any Patent Rights subject to a terminal disclaimer and the Patent Rights over which the application is disclaimed shall be enforced and licensed), which consent shall not be unreasonably withheld. Following receipt of such written consent, such Party shall limit any statement added to the specification of any Patent Right within the Collaboration Intellectual Property to such information which is strictly required by 35 U.S.C. § 102(c)(3) and the rules and regulations promulgated thereunder to disqualify as prior art subject matter that would otherwise qualify under 35 U.S.C. §102 (a)(2) as contemplated by the CREATE Act, and which is consistent with the terms and conditions of this Agreement.
- 10. CONFIDENTIALITY.**
- 10.1 Obligation of Confidentiality.** As of and after the Effective Date, all Confidential Information disclosed, revealed or otherwise made available to one Party ("**Receiving Party**") by or on behalf of the other Party ("**Disclosing Party**") under, or as a result of, this Agreement is made available to the Receiving Party solely to permit the Receiving Party to exercise its rights, and perform its obligations, under this Agreement or any Related Agreement. The Receiving Party shall not use any of the Disclosing Party's Confidential Information for any other purpose, and shall not disclose, reveal or otherwise make any of the Disclosing Party's Confidential Information available to any other Person, firm, corporation or other entity, without the prior written authorization of the Disclosing Party, except as explicitly stated in this Article 10.

10.2 Additional Obligations. In furtherance of the Receiving Party's obligations under Section 10.1 hereof, the Receiving Party shall take all reasonable steps, and shall implement all appropriate and reasonable safeguards, to seek to prevent the unauthorized use or disclosure of any of the Disclosing Party's Confidential Information. Without limiting the generality of this Section 10.2, the Receiving Party shall disclose any of the Disclosing Party's Confidential Information only to those of its officers, employees, Affiliates, Sublicensees and consultants, and its potential Sublicensees, and consultants that have a need to know the Disclosing Party's Confidential Information, in order for the Receiving Party to exercise or confirm its rights or the scope of the licenses granted hereunder, and/or to perform its obligations under this Agreement. Furthermore, the Receiving Party shall be permitted to disclose the existence and a reasonably redacted version of this Agreement (excluding its exhibits) to its assignees and investors, and to potential assignees and investors who have a reasonable need to review the terms of this Agreement. The disclosures under this Section 10.2 are subject to such officers, employees, Affiliates, Sublicensees, consultants, assignees and investors, and potential Sublicensees, consultants, assignees and investors having executed appropriate agreements containing substantially similar terms regarding confidentiality and non-use as those set out in this Agreement or are otherwise bound by obligations of confidentiality effectively prohibiting the unauthorized use or disclosure of the Disclosing Party's Confidential Information. The Receiving Party shall furnish the Disclosing Party with written notice immediately of it becoming aware of any unauthorized use or disclosure of any of the Disclosing Party's Confidential Information by any officer, employee, Affiliate, Sublicensee, consultant, assignee or investor, or potential Sublicensee, consultant, assignee or investor of the Receiving Party, and shall take all actions that the Disclosing Party reasonably requests in order to prevent any further unauthorized use or disclosure of the Disclosing Party's Confidential Information. Furthermore, CureVac is entitled to disclose the terms and conditions of this Agreement to licensees and potential licensees, subject to redaction to show only the provisions which are relevant for the scope of the licenses granted hereunder [*****] and further subject to such licensee or potential licensee having executed an appropriate confidentiality agreement.

10.3 Limitations. The Receiving Party's obligations under Sections 10.1 and 10.2 hereof shall not apply to the extent that the Receiving Party can demonstrate by competent evidence that any of the Disclosing Party's Confidential Information:

- (a) passes into the public domain, or becomes generally available to the public through no fault of the Receiving Party;
- (b) was known to the Receiving Party or its Affiliates prior to being made available hereunder without restriction of use or disclosure;
- (c) is disclosed, revealed or otherwise made available to the Receiving Party or its Affiliates by a Third Party, without restriction of use or disclosure, that is under no obligation of non-disclosure and/or non-use to the Disclosing Party in relation to the subject item;
- (d) has been independently developed or created by the Receiving Party or its Affiliates without access to the Disclosing Party's Confidential Information;

- (e) is necessary or useful to be disclosed by the Receiving Party for making applications or submissions to or otherwise dealing with Regulatory Authorities in connection with the Development, Manufacture or Commercialization of a Licensed Vaccine or Licensed Product or for obtaining Patent Rights protecting Collaboration Intellectual Property, provided, however, that the Receiving Party shall furnish the Disclosing Party with as much prior written notice of such disclosure requirement as reasonably practicable; or
- (f) is required to be disclosed under Applicable Laws and to the extent required to be disclosed under Applicable Laws; provided, however, that the Receiving Party shall furnish the Disclosing Party with as much prior written notice of such disclosure requirement as reasonably practicable, so as to permit the Disclosing Party, in its sole discretion, to take appropriate action, including seeking a protective order, in order to prevent the Disclosing Party's Confidential Information from passing into the public domain or becoming generally available to the public.

10.4 Materials. The Parties hereby agree that any Material to be transferred from CureVac to BI under this Agreement, other than Licensed Vaccines transferred under the Clinical Supply Agreement or any Related Agreement to be concluded in accordance with Section 6.2 above, shall remain the exclusive property of CureVac, and BI shall use such Material only for purposes of this Agreement. In particular, for any Materials transferred to BI under Article 6 (i.e., to enable BI, its Affiliates or a Permitted Third Party CMO to Manufacture Licensed Vaccines) BI further agrees not use such Materials other than to Manufacture Licensed Vaccines in accordance with the terms of this Agreement. BI shall not transfer such Material to or use such Material on behalf of a Third Party other than a Permitted Third Party CMO. Furthermore, BI undertakes to keep such Materials secure and safe from loss, damage, theft, misuse and unauthorized access and to use such Materials in accordance with all Applicable Laws. Upon termination of this Agreement, BI shall cease use of and return to CureVac or destroy (as CureVac shall specify in writing promptly upon termination of this Agreement) all such Materials in its possession upon such termination, and shall certify such return or destruction in writing to CureVac.

10.5 Return of Confidential Information. Subject to Sections 13.1 and 14.4 and subject to any other right to retain Confidential Information, upon expiration or termination of this Agreement for any reason whatsoever, the Receiving Party shall cease all use of and return to the Disclosing Party, or destroy, as the Disclosing Party shall specify in writing promptly upon such expiration or termination, all copies of all documents and other materials that contain or embody any of the Disclosing Party's Confidential Information, except to the extent that the Receiving Party is required by Applicable Laws to retain such documents and materials, and provided further that each Party may keep a single copy of all Confidential Information within its legal archives solely to assure compliance with the provisions of this Article 10. The obligation to destroy shall also apply to copies of any computer records and files containing such Confidential Information, except to the extent created by the Receiving Party's automatic archiving and backup computer systems. Within [*****] after the date of expiration or termination of this Agreement, the Receiving Party shall confirm that the Receiving Party has complied with its obligations under this Section 10.5.

- 10.6 Survival.** All of the Receiving Party's obligations under Sections 10.1 and 10.2 hereof, with respect to the protection of the Disclosing Party's Confidential Information, shall for a period of [*****] survive the expiration or termination of this Agreement for any reason whatsoever.
- 10.7 Public Announcements.** No public announcement concerning the existence of, terms, or subject matter of this Agreement shall be made, either directly or indirectly, by any Party, without first obtaining the prior written approval of the other Party and agreement upon the nature and text of such public announcement which such agreement and approval shall not be unreasonably withheld or delayed; except as may be legally required (i) by Applicable Laws, (ii) by the listing standards or agreements of any national or international securities exchange or other similar laws of a governmental authority, market or agency, (iii) to respond to an inquiry of a governmental authority or agency, or (iv) in a judicial, administrative or arbitration proceeding. In all instances, the Party concerned shall seek appropriate confidential treatment of this Agreement and the subject matter hereof and the Parties shall agree in advance on any redacted forms of this Agreement that are filed publicly, such agreement not to be unreasonably withheld or delayed. The Party desiring to make any such public announcement (including those which are legally required) shall inform the other Party of the proposed announcement or disclosure in reasonably sufficient time prior to public release, which shall be not less than [*****] (or such shorter period as the Parties may agree upon in writing, or such shorter period applicable to those public announcements which are legally required) prior to release of such proposed public announcement, and shall provide the other Party with a written copy thereof in order to allow such other Party to comment upon such public announcement. Each Party agrees that it shall co-operate fully with the other Party with respect to all disclosures regarding this Agreement to any governmental or regulatory agencies, including requests for confidential treatment of proprietary information of either Party included in any such disclosure. Neither Party will issue a press release without the prior written consent of the other Party. The Parties agree that each Party may, following the Effective Date, issue a press release describing this Agreement in general terms, provided that the content of such press release shall first be approved by the other Party. For such purpose, the Party intending to issue the press release shall provide the other Party with a draft press release at least [*****] prior to the proposed date of disclosure.
- 10.8 Applicable Laws.** Nothing in this Agreement shall be construed as preventing or in any way inhibiting either Party from complying with Applicable Laws governing activities and obligations undertaken pursuant to this Agreement in any manner which it reasonably deems appropriate, including, for example, by disclosing to Regulatory Authorities confidential or other information received from the other Party, subject to Sections 10.3 (e) and (f) and 10.7.

10.9 Publication. Prior to the First Commercial Sale of a Licensed Product, publications in a journal, paper, magazine or any other such similar disclosure relating to or arising from this Agreement and/or the Development or Commercialization of Licensed Vaccines and/or Licensed Products shall not take place without the prior written agreement of both BI and CureVac, such agreement not to be unreasonably withheld, provided, however, that with respect to the Licensed Vaccines and Licensed Products CureVac shall only be permitted to use the Development Data on the Licensed Vaccines and Licensed Products as reference to market its mRNA based technologies and shall not make any other publication regarding the Licensed Vaccines and Licensed Products unless expressly permitted by BI. Any draft publication intended to be submitted for publication or disclosure by one of the Parties hereto shall first be sent to the other Party in order to allow such Party to make comments thereon, and to preserve its Intellectual Property by delaying such publication and/or removing its Confidential Information. Each Party shall comply with the other Party's request to delete references to the other Party's Confidential Information in any such publication, and agrees to withhold publication of same for the time necessary to permit the other Party to obtain optimum patent protection, such time period not to exceed [*****]. BI's obligation to provide CureVac with any draft publication intended to be submitted for publication or disclosure by BI in respect of a Licensed Product ceases upon the First Commercial Sale of such Licensed Product. Each Party's contribution shall be acknowledged in any publication by co-authorship or acknowledgment, whichever is appropriate in accordance with customary scientific practice. Once approval has been granted for a particular disclosure, such disclosed information may be subsequently disclosed without requiring additional approval for each instance of disclosure.

11. WARRANTIES AND LIABILITIES.

11.1 Representations and Warranties of each Party. Each of CureVac and BI hereby represents and warrants to the other Party hereto as follows on the Effective Date:

- (a) it is a corporation or entity duly organized and validly existing under the laws of the state or other jurisdiction of its incorporation or formation;
- (b) the execution, delivery and performance of this Agreement by such Party does not conflict with any other agreement by which it is bound, and has been duly authorized by all requisite corporate action and does not require any shareholder action or approval;
- (c) it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder; and
- (d) it shall at all times comply with all Applicable Laws relating to its activities under this Agreement.

11.2 Additional Representations and Warranties of CureVac. Subject to the disclosures in the attached Exhibit 11.2, CureVac hereby represents and warrants that, on the Effective Date:

- (a) it Controls the right, title and interest in the Patent Rights comprised in the CureVac Background Intellectual Property as listed in Exhibit 1.17, and to the extent licensed under this Agreement;

- (b) it is the sole and exclusive owner (free and clear of any liens, mortgages, security interests, charges, encumbrances or otherwise) of the CV9202 Specific Patent Rights listed on Exhibit 1.23;
- (c) all employee inventions covered by the Patent Rights listed in part (A)(1) of Exhibit 1.17 and on Exhibit 1.23 have been duly claimed by CureVac in accordance with the German Arbeitnehmererfindungsgesetz or CureVac has entered into binding agreements transferring the rights in and to such inventions to CureVac;
- (d) it has the right to enter into this Agreement and to grant the licenses contained herein, and neither CureVac nor any of its Affiliates is a party to or otherwise bound by any agreement that will result in any person or entity obtaining any interest in, or that would give to any entity or person any right to assert any claim in or with respect to, any of Bl's exclusive rights granted under this Agreement;
- (e) to its knowledge, no Third Party has any right, title or interest in or to any of the CureVac Licensed Patent Rights within the scope of the exclusive licenses granted hereunder;
- (f) all of the Patent Rights listed on part (A)(1) of Exhibit 1.17 and on Exhibit 1.23 are pending or issued and have not been abandoned as of the Effective Date;
- (g) to CureVac's knowledge, no claim, suit, litigation, arbitration, opposition or other proceeding before a court of law, arbitral body, Regulatory Authority or patent office is pending or has been rendered or is threatened by any Third Party which would limit, cancel or question the validity, enforceability, ownership or use of any of the Patent Rights listed on part (A)(1) of Exhibit 1.17 and on Exhibit 1.23;
- (h) Exhibits 1.17 and 1.23 list all of CureVac's and CureVac's Affiliates' Patent Rights that to the knowledge of CureVac would be infringed by the Non-Clinical and Clinical Development or Commercialization of Licensed Vaccines or Licensed Products;
- (i) to CureVac's knowledge, no Patent Rights or other Intellectual Property owned or controlled by a Third Party exist that could materially conflict with the grant of rights by CureVac to Bl under this Agreement; and
- (j) it has furnished or made available to Bl all material information that is in its possession concerning CV9202 and relevant to the safety or efficacy of CV9202, and, to CureVac's knowledge, such information is accurate, complete and true in all material respects.

11.3 Disclaimer. CureVac makes no representation or warranty and specifically disclaims any guarantee that the Development of the Licensed Vaccines will be successful, in whole or in part, or that the CureVac Licensed Intellectual Property will be suitable for Development and/or Commercialization of Licensed Products. Subject only to Sections 11.1 and 11.2 above, CureVac expressly disclaims any warranties or conditions, express, implied, statutory or otherwise with respect to the CureVac Licensed Intellectual Property and Licensed Vaccines and Licensed Products, including any warranty of merchantability or fitness for a particular purpose. In particular, subject only to Sections 11.1 and 11.2, CureVac expressly disclaims any warranties or conditions, express, implied, statutory or otherwise with respect to the non-infringement of the CureVac Licensed Intellectual Property and the Licensed Vaccines and Licensed Products.

11.4 Limitation of Liability. Subject to Section 12 of this Agreement and except in the case of gross negligence (*grobe Fahrlässigkeit*), an intentional act (*Vorsatz*) or bodily injury, neither Party shall be liable to the other Party for any indirect, incidental, punitive or consequential damages including lost profits, whether based on contract or tort, or arising under Applicable Laws or otherwise.

12. INDEMNIFICATION.

12.1 CureVac's Obligations to Indemnify. CureVac shall indemnify, defend and hold BI and its Affiliates, and its and their employees, agents, officers, and directors (individually and/or collectively referred to herein as a "**BI Party**") harmless from and against any and all losses, liabilities, damages, expenses (but excluding indirect, incidental, special, consequential or punitive losses or damages, etc.) or fees (but only reasonable attorneys fees and expenses and costs of litigation pertaining to such BI Claim) paid or payable by BI or a BI Party to a Third Party (collectively, "**BI Losses**") to the extent that such BI Losses result from or arise in connection with a claim, suit or other proceeding made or brought by a Third Party against BI or a BI Party (a "**BI Claim**") based on, resulting from, or arising in connection with:

- (a) any claim by [*****] regarding an allegation that the manufacture, use, sale or offer for sale of Licensed Vaccine and/or Licensed Product pursuant to and consistent with this Agreement infringes such claimant's intellectual property rights, provided, however, CureVac grants rights (in particular sub-licenses) to such intellectual property rights to BI under this Agreement;
- (b) any material breach of any of CureVac's representations or warranties set forth in this Agreement; **or**
- (c) any other grossly negligent, willful or intentionally wrongful act, error or omission on the part of CureVac, or any officer, director, employee, agent or representative of CureVac;

provided, however, that CureVac shall not be obligated to indemnify, defend or hold harmless BI or a BI Party from any BI Claim or for any BI Loss incurred by BI or a BI Party to the extent arising out of, or attributable to, (A) a material breach by BI, or any BI Party of any obligation, covenant, agreement, representation or warranty of BI, or a BI Party contained in this Agreement or under a Related Agreement; (B) any material violation of Applicable Laws by BI, or a BI Party, in connection with the performance of BI's or its Affiliates' obligations under this Agreement or under a Related Agreement; (C) any act or omission by BI, or a BI Party, which constitutes gross negligence, or willful or intentional misconduct on the part of BI, or a BI Party; or (D) BI Claims to the extent BI is responsible for indemnifying, defending and holding CureVac and CureVac Parties harmless for such claims as set forth in Section 12.2 or in the Clinical Supply Agreement or any Related Agreement to be concluded in accordance with Section 6.2 above.

12.2 BI's Obligations to Indemnify. BI shall indemnify, defend and hold CureVac and its Affiliates, and its and their officers, directors, trustees, agents and employees (individually and/or collectively referred to herein as a "**CureVac Party**") harmless from and against any and all losses, liabilities, damages, expenses (but excluding indirect, incidental, special, consequential or punitive losses or damages, etc.) or fees (but only reasonable attorney fees and expenses and costs of litigation pertaining to such CureVac Claim) paid or payable by CureVac or a CureVac Party to a Third Party (collectively, "**CureVac Losses**") to the extent that such CureVac Losses result from or arise in connection with a claim, suit or other proceeding made or brought by a Third Party against CureVac or a CureVac Party (a "**CureVac Claim**") based on, resulting from, or arising in connection with:

- (a) any material breach of any of BI's representations or warranties set forth in this Agreement;
- (b) any other grossly negligent, willful or intentionally wrongful act, error or omission on the part of BI, or any officer, director, employee, agent or representative of BI;
- (c) any claim that any of the Licensed Vaccines and Licensed Products fail to conform with the requirements of any Applicable Laws, including the failure by BI to obtain any required Regulatory Approvals for the Licensed Vaccines and Licensed Products;
- (d) any product liability claim regarding the Licensed Vaccine or Licensed Product;

provided, however, that BI shall not be obligated to indemnify, defend or hold harmless CureVac or a CureVac Party from any CureVac Claim or for any CureVac Loss incurred by CureVac or an CureVac Party to the extent arising out of or attributable to: (A) a material breach by CureVac, or any CureVac Party of any obligation, covenant, agreement, representation or warranty of CureVac, or any CureVac Party contained in this Agreement or in any Related Agreement; or (B) any material violation of Applicable Laws by CureVac or a CureVac Party, in connection with the performance of CureVac's or its Affiliates' obligations under this Agreement or under any Related Agreement; or (C) any act or omission by CureVac, or a CureVac Party, which constitutes gross negligence, or wilful or intentional misconduct on the part of CureVac, or a CureVac Party; or (D) CureVac Claims to the extent CureVac is responsible for indemnifying, defending and holding BI and/or any BI Party harmless for such claims as set forth in Section 12.1 or in the Clinical Supply Agreement or any Related Agreement to be concluded in accordance with Section 6.2 above.

12.3 Indemnification Procedures.

- 12.3.1 Each indemnified Party shall notify in English the indemnifying Party in writing (and in reasonable detail) of the Claim within [****] after receipt by such indemnified Party of notice of the BI Claim or the CureVac Claim, as the case may be, or otherwise becoming aware of the existence or threatened existence thereof (such BI Claim or CureVac Claim being referred to as a "Claim"). Failure to give such notice shall not constitute a defense, in whole or in part, to any claim by an indemnified Party hereunder except to the extent the rights of the indemnifying Party are materially prejudiced by such failure to give notice. The indemnifying Party shall notify in English the indemnified Party of its intentions as to defense of the Claim or potential Claim in writing within [****] after receipt of notice of the Claim. If the indemnifying Party assumes the defense of a Claim against an indemnified Party, the indemnifying Party shall have no obligation or liability under this Article 12 as to any Claim for which settlement or compromise of such Claim or an offer of settlement or compromise of such Claim is made by the indemnified Party without the prior written consent of the indemnifying Party.
- 12.3.2 The indemnifying Party shall assume exclusive control of the defense and settlement (including all decisions relating to litigation, defense and appeal) of any such Claim (so long as it has confirmed its indemnification obligation responsibility to such indemnified Party under this Section 12.3 with respect to a given Claim); provided, however, that the indemnifying Party may not settle such Claim in any manner that would require payment by the indemnified Party, or would materially adversely affect the rights granted to the indemnified Party hereunder, or would materially conflict with the terms of this Agreement, or adversely affect such Party or its products, without first obtaining the indemnified Party's prior written consent, which consent shall not be unreasonably withheld.
- 12.3.3 The indemnified Party shall reasonably cooperate with the indemnifying Party in its defense of the Claim (including, without limitation, copying and making documents and records available for review and making persons within its control available for pertinent testimony in accordance with the confidentiality provisions of Article 10, and neither Party shall be required to divulge privileged material to the other) at the indemnifying Party's expense. If the indemnifying Party assumes defense of the Claim, the indemnified Party may participate in, but not control, the defense of such Claim using attorneys of its choice and at its sole cost and expense, with such cost and expense not being covered by the indemnifying Party. If the indemnifying Party does not agree to assume the defense of the Claim asserted against the indemnified Party (or does not give notice that it is assuming such defense), or if the indemnifying Party assumes the defense of the Claim in accordance with this Section 12.3 yet fails to defend or take other reasonable, timely action, in response to such Claim asserted against the indemnified Party, the indemnified Party shall have the right to defend or take other reasonable action to defend its interests in such proceedings, and shall have the right to litigate, settle or otherwise dispose of any such Claim; provided, however, that no Party shall have the right to settle a Claim in a manner that would adversely affect the rights granted to the other Party hereunder, or would materially conflict with this Agreement, or would require a payment by the Party, or adversely affect the Party (its Affiliates) or its products in or outside the Territory, without the prior written consent of the Party entitled to control the defense of such Claim, which consent shall not be unreasonably withheld.

13. TERM AND TERMINATION.

- 13.1 Expiry.** This Agreement shall automatically become effective as of the Effective Date. It shall remain in full force and effect on a country-by-country and Licensed Product-by-Licensed Product basis, for the duration of the Royalty Term, unless terminated earlier by either Party for whatever reason. Upon expiry of this Agreement for a Licensed Product in any country, BI shall retain its license granted under Sections 2.1 (including the right to sublicense in accordance with Section 2.2) and 6.3 as an irrevocable, perpetual, fully paid-up and royalty free right to use the CureVac Licensed Intellectual Property and/or the CureVac Licensed Manufacturing Intellectual Property, as applicable, solely for such Licensed Produces) in such country and in the Field, such license to be exclusive for the longer of (i) the term during which CureVac supplies at least [*****] of BI's demand for Licensed Vaccines to BI; **and** (ii) [*****] upon expiry of this Agreement; and to be non-exclusive thereafter.
- 13.2 Termination for Convenience.** BI shall be entitled to terminate this Agreement at its sole discretion at any time by giving [*****] prior written notice.
- 13.3 Termination for Material Breach.** In the event that either Party ("**Breaching Party**") commits a material breach of any of its obligations hereunder, such material breach to include a breach of the obligations under Section 4.2, the other Party hereto ("**Non-Breaching Party**") may give the Breaching Party written notice of such material breach, which notice shall clearly identify the material breach, the intent to terminate this Agreement for such material breach and the actions or conduct that it considers to be an acceptable cure of such material breach. In the event that the Breaching Party fails to cure such material breach within [*****] in the event of a default in payment, and within [*****] in the event of any other breach, after the date of the Non-Breaching Party's notice thereof, the Non-Breaching Party may terminate this Agreement by giving written notice of termination to the Breaching Party. In case the Party receiving a notice of a material breach ("**Alleged Breaching Party**") disputes to have materially breached this Agreement, such party shall provide written notice hereof to the other Party within [*****] following its receipt of notice of termination. In such event termination of this Agreement shall not occur if the Alleged Breaching Party within [*****] after such written notice refers the dispute for resolution through a dispute resolution panel of three (3) independent legal arbitrators with expertise in pharmaceutical licensing ("**Dispute Resolution Panel**"). Each Party shall nominate within [*****] of the request one arbitrator, while the third arbitrator shall be mutually agreed by the Parties within another [*****]. If the Parties are unable to agree on the third arbitrator, the third arbitrator shall be selected and nominated by the two arbitrators appointed by the Parties. Each Party shall submit to the Dispute Resolution Panel a written report setting forth its arguments to support or to rebut a material breach which justifies a termination for cause under this Section 13.3 within the later of (i) [*****] following a referral to the Dispute Resolution Panel, or (ii) [*****] after selection of such Dispute Resolution Panel. The Dispute Resolution Panel shall meet face-to-face to discuss the written reports and shall be entitled, at its discretion to invite for a hearing representatives of the Parties or other Third Party experts, subject to each Third Party expert executing an appropriate confidentiality agreement. The Dispute Resolution Panel shall then select one of the proposals from the Parties, and shall not have the authority to render any substantive decision other than the proposal of either BI or CureVac. The decision of the Dispute Resolution Panel shall be final and binding on the Parties and the Party whose proposal has not been selected by the Dispute Resolution Panel will pay all costs of the Dispute Resolution Panel. If, as a result of such dispute resolution process, it is determined that the Alleged Breaching Party materially breached this Agreement and such Party does not cure such breach within [*****] after the date of the decision by the Dispute Resolution Panel (or within [*****] in the event of a default in payment) (the "Additional Cure Period"), then such termination shall be effective as of the expiration of the Additional Cure Period. Such dispute resolution proceeding does not suspend any obligations of either Party hereunder, and each Party shall use reasonable efforts to mitigate any damage. If as a result of such dispute resolution proceeding it is determined that the Alleged Breaching Party did not materially breach this Agreement (or such breach was cured during the Additional Cure Period), then no termination shall be effective, and this Agreement shall continue in full force and effect. Notwithstanding the foregoing, in the case of an allegation that BI has failed to devote Commercially Reasonable Efforts in relation to a Licensed Vaccine or a Licensed Product, CureVac shall not have the right to terminate this Agreement (a) if no Change of Control had occurred at the time of termination: following the first acceptance of a marketing authorization application/NDA filing in a Major Market Country; **and** (b) if a Change of Control had occurred at the time of termination: following initiation of or continuation into the first Phase III Clinical Trial of a Licensed Vaccine, provided that BI pays CureVac the amount of such damages that have been awarded by a dispute resolution proceeding pursuant to Section 15.6. Termination of this Agreement in accordance with this Section 13.3 shall not affect or impair the Non-Breaching Party's right to pursue any legal remedy, including the right to recover direct damages, for any harm suffered or incurred by the Non-Breaching Party as a result of such breach.

13.4 Termination for Challenge of CureVac Licensed Patent Rights. CureVac may terminate this Agreement by providing [*****] prior written notice to BI in the event BI or any of its Affiliates directly or indirectly challenges the validity of the CureVac Licensed Patent Rights in a legal proceeding or supports a Third Party in the challenge of a CureVac Licensed Patent Right in a legal proceeding (in each case before a court of competent jurisdiction). Any such termination shall only become effective if BI or its Affiliate has not withdrawn such action before the end of the above notice period. In the event a Sublicensee of BI challenges the validity of a CureVac Licensed Patent Right, CureVac may terminate this Agreement hereunder, if BI does not terminate such sublicense agreement within the [*****] notice period.

14. CONSEQUENCES OF TERMINATION

14.1 Reversion of Rights. Subject to Section 14.6(b) below, upon termination, but not expiration, of this Agreement, BI's licenses under Article 2 and Article 6 of this Agreement automatically lapse and all of CureVac's rights to the CureVac Licensed Intellectual Property automatically revert back to CureVac.

- 14.2 Sell Off.** Immediately upon the termination of this Agreement by BI in accordance with Section 13.2 above or by CureVac in accordance with Sections 13.3 or 13.4, BI shall cease all Development and Commercialization of the Licensed Vaccines and Licensed Products under the licenses granted hereunder; provided, however, that BI shall have the right to distribute and sell its existing inventory of the Licensed Products for a period of not more than [*****] following the date of the termination hereof, subject to BI's continuing obligation to pay sales milestones and royalties with respect to the Net Sales derived from the distribution and sale of such existing inventory of the Licensed Products, in accordance with the requirements of Sections 7.3, 7.4 and 7.8 above.
- 14.3 Accrued Payment Claims.** Termination of this Agreement for any reason whatsoever shall not relieve BI of its obligations to pay all royalties, milestones and other amounts payable to CureVac which have accrued prior to, but remain unpaid as of, the date of expiration or termination hereof, or which accrue thereafter, in accordance with Section 14.2 hereof.
- 14.4 Access to Regulatory Approvals and BI Intellectual Property.**

In the event of termination of this Agreement by BI pursuant to Section 13.2 or by CureVac pursuant to Section 13.3 or 13.4, CureVac shall be entitled to demand from BI the transfer and/or assignment, as applicable, of the following:

- (a) all rights and titles which were taken from a Third Party during the course of the license and which are necessary to ongoing activities, provided that CureVac shall refund any payments to be made by BI to such Third Party after the effective date of termination for the use of such rights and titles;
- (b) Regulatory Approvals held by BI, its Affiliates or Sublicensees, and if Regulatory Approvals have not been obtained by BI, its Affiliates or Sublicensees, CureVac may require that BI transfers to CureVac the status of any application for the Regulatory Approvals and notifies the competent Regulatory Authority thereof and supplies CureVac with all documents and clinical data already prepared by BI, its Affiliates or Sublicensees for the filing of applications for Regulatory Approvals (with BI using its reasonable efforts to promptly undertake such actions); and/or
- (c) a non-exclusive, cost-free, perpetual and worldwide license (with the right to sublicense) to the BI Intellectual Property (other than Afatinib-related BI Background Intellectual Property) to the extent such BI Intellectual Property has been used for the Development, Manufacture and/or Commercialization of the Licensed Vaccines and Licensed Products, in each instance for the continued Development, Manufacture and Commercialization of the Licensed Vaccines and Licensed Products, the Patent Rights comprised in such BI Intellectual Property to be listed or otherwise identified upon CureVac's request of such license.

- 14.5 Re-assignment and Re-transfer of CV9202 Specific Patent Rights and Assigned Patent Rights.** In the event of a termination by BI pursuant to Section 13.2 or pursuant to Section 13.3, if BI elects to terminate the Agreement (Section 14.6 (a) below) or by CureVac pursuant to Section 13.3 or 13.4, BI shall re-assign and re-transfer, and hereby re-assigns and re-transfers to CureVac effective as of such termination (i) the CV9202 Specific Patent Rights and (ii) the Assigned Patent Rights or the share thereof that was assigned and transferred from CureVac to BI pursuant to Section 9.3, as the case may be, and CureVac hereby accepts such re-assignment and re-transfer. In order to effect the re-assignment and re-transfer, BI will support CureVac, upon CureVac's request in executing all assignment documentation and providing any declaration which may be necessary to effect the re-assignment and re-transfer of the CV9202 Specific Patent Rights and the Assigned Patent Rights from BI to CureVac. Except in the case of termination by BI in accordance with Sections 13.3 and 14.6(a), BI shall be responsible for, and will pay all necessary out-of-pocket expenses with respect to the re-assignment and re-transfer of the CV9202 Specific Patent Rights and the Assigned Patent Rights, including the fees for notarization and legalization of the assignment documents, and for recording such assignment documents with the competent patent offices.
- 14.6 Termination for Cause by BI.** In the event of a termination by BI in accordance with Section 13.3 above, BI may elect to
- (a) terminate the Agreement, in which case all licenses and rights granted by either Party to the other Party shall terminate, BI shall cease to Develop, Manufacture and Commercialize the Licensed Vaccines and Licensed Products and, in addition to any other legal remedy BI might have, CureVac shall reimburse BI for all reasonable expenses related to the orderly wind down of all ongoing Clinical Trials; or
 - (b) continue to exercise its rights and obligations (except as set forth in this Section 14.6(b)) hereunder, and in such case the JSC shall be disbanded, BI shall have no further diligence obligations with respect to the Licensed Vaccines and Licensed Products, and CureVac shall pay to BI the amount of such damages that have been awarded by a dispute resolution proceeding pursuant to Section 15.6 below. For the avoidance of doubt, in the event BI elects to continue to exercise its rights and obligations under this Agreement, the terms and conditions of this Agreement, including the payment obligations, shall continue to apply with the exception only of the diligence obligations and the obligation to convene and exchange information in the Joint Steering Committee.
- 14.7 Wind Down or Transfer of Development Work.** In the event of termination of this Agreement by BI pursuant to Section 13.2 or by CureVac pursuant to Section 13.3 or 13.4 and provided such termination occurs while Development activities regarding the Licensed Vaccines are still ongoing, BI shall

- (a) promptly inform CureVac on the status of the ongoing Clinical Trials, the estimated timelines, budgets and required resources of such Clinical Trials and answer any reasonable question CureVac may have regarding such Clinical Trials; **and**
- (b) wind down in an orderly fashion any Clinical Trials and cease all other Development activities, or, at the election of CureVac, permit CureVac to take over such Development activities, *provided that* BI informs CureVac in writing on all material Development activities and associated costs and CureVac provides written notice to BI of its intent to take over such Development activities prior to effective termination of this Agreement or within [*****] after receipt of the information on the ongoing Development activities, whichever is later. Upon receipt of such written notice by BI, BI shall use Commercially Reasonable Efforts to (i) transfer all data and information and (ii) provide all support, in each case (i) and (ii) as reasonably required for CureVac to take over the Development activities, and the Parties shall discuss in good faith the details of a transfer of the respective Clinical Trials and other Development activities to CureVac. If - and only if - CureVac decides to take over the Development activities, CureVac shall be responsible for the costs of such Development activities which are being incurred by either Party after the effective date of termination, with the exception only of the internal costs incurred at BI.

14.8 Survival. Sections 1, 4.1.2, 6.5, 7.8.11, 7.9, 9.1 to 9.6, 10.1 to 10.8, 11.4, 12, 13.1, 13.3, 14, 15.1, 15.3 to 15.15 shall survive the expiration or termination of this Agreement.

15. GENERAL PROVISIONS.

15.1 Assignment. Subject to the other terms of this Agreement, neither Party shall have the right or the power to assign any of its rights or obligations under this Agreement without the prior written consent of the other Party, such written authorization not to be unreasonably withheld or delayed; *provided, however*, that the prior written authorization of the other Party shall not be required for a Party to assign all its rights and delegate the performance of all of its obligations hereunder to (i) an Affiliate; or (ii) to a Third Party which acquires all or substantially all of its assets related to this Agreement and the Related Agreements between the Parties. Any permitted assignment hereunder by either Party to an Affiliate or to a Third Party pursuant to this Section 15.1 shall not relieve such Party of any of its obligations under this Agreement, including, but not limited to, the Party's obligation to make the payments under Article 7.

15.2 Change of Control of CureVac. In the event of (i) a direct or indirect acquisition by any pharmaceutical company of beneficial ownership of fifty percent (50%) or more of the shares in CureVac; or (ii) the sale or other disposition to any pharmaceutical company of all or substantially all of the assets of CureVac; or (iii) the merger, amalgamation or other form of business combination or similar transaction between CureVac and one or more pharmaceutical companies ("**Change of Control**") the following shall apply:

- (a) CureVac shall promptly give written notice of such Change of Control to BI;

- (b) Upon BI's written request, CureVac and its Affiliates shall promptly: (i) return any and all Confidential Information and Materials of BI to BI within [*****] upon BI's request, save that CureVac may retain copies of BI's Confidential Information as set forth in Section 10.5;
- (c) BI shall have the right to be released of its ongoing disclosure and information exchange obligations according to Sections 4.3 (regulatory matters including the grant of any further right of cross referencing) and 5.2 (sales forecast). In addition, the JSC and/or the Joint Project Team shall be dissolved upon BI's request.
- (d) In addition to the confidentiality obligations according to Section 10, CureVac shall take reasonable steps to ensure that any Confidential Information of BI is not shared with any others within CureVac that are not required to manage, perform and exercise CureVac's rights and obligations under this Agreement,

provided, however, that no Change of Control for purposes of this Section 15.2 shall occur if the pharmaceutical company taking control over CureVac is controlled by Mr. Dietmar Hopp and/or dievini Hopp BioTech holding GmbH & Co. KG. The term "controlled" as used in the aforementioned sentence refers to the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of a legal entity, whether through the ownership of voting securities, by contract or otherwise.

15.3 Force Majeure. If the performance of any part of this Agreement by either Party, or any obligation under this Agreement, is prevented, restricted, interfered with or delayed by reason of any cause beyond the reasonable control of the Party liable to perform, unless conclusive evidence to the contrary is provided, the Party so affected shall, upon giving written notice to the other Party, be excused from such performance to the extent of such prevention, restriction, interference or delay, provided that the affected Party shall use its Commercially Reasonable Efforts to avoid or remove such causes of non-performance and shall continue performance with the utmost dispatch whenever such causes are removed. When such circumstances arise, the Parties shall discuss what, if any, modification of the terms of this Agreement may be required in order to arrive at an equitable solution.

15.4 Notices. All notices, reports and other communications between the Parties under this Agreement shall be sent by registered mail, postage prepaid and return receipt requested, by courier, or by facsimile, with a confirmation copy sent by registered mail or courier, addressed as follows:

To:	CureVac	CureVac GmbH
Attention:		Chief Executive Officer/Geschaefsfuehrer
Address:		Paul-Ehrlich-Str. 15
		72076 Tübingen, Germany
Fax:		[*****]

With copy to: CureVac GmbH
Attention: General Counsel
Address: Paul-Ehrlich-Str. 25
72076 Tubingen, Germany
Fax: [*****]

To: BI
Attention: Boehringer Ingelheim International GmbH
Head of PM Business Development & Licensing/Strategy
Address: Binger StraBe 173 55216 Ingelheim am Rhein
Fax: [*****]

With copy to: BI
Attention: Boehringer Ingelheim International GmbH
Head of Legal Strategic Transactions
Address: Binger StraBe 173 55216 Ingelheim am Rhein
Fax: [*****]

or such other addresses or facsimile numbers as shall be furnished by like notice by such Party. Any such notice or communication given by mail shall be deemed to have been given [*****] after the date so mailed unless sent by an internationally recognized express courier and receipt confirmed, and any such notice or communication given by facsimile shall be sent with confirmation copy and shall be deemed to have been given when sent by facsimile and the appropriate answer back received, provided however, that should such answer back be automatically generated outside of regular business hours of the recipient Party, such notice shall be deemed to have been given on the next regular business day of such Party.

15.5 Governing Law. This Agreement and all disputes arising hereunder, shall be exclusively governed by, and interpreted and enforced in accordance with the laws of Germany, without reference to conflicts of laws principles. The validity or enforceability of the intellectual property rights shall be subject to an evaluation under the law of the country in which the intellectual property rights were applied for or have been issued.

15.6 Dispute Resolution.

15.6.1 In the event of any dispute arising out of or in connection with this Agreement that cannot be settled by good faith negotiations over a period of [*****] within the JSC, and thereafter over an additional period of [*****] between senior management representatives of the Parties, the Parties agree to try to solve such dispute amicably by mediation. The Parties shall conduct a mediation procedure according to the Mediation Rules of the Deutsche Institution fur Schiedsgerichtsbarkeit e.V. (DIS) in effect on the date of the commencement of the mediation proceedings. The location of the mediation proceedings will be Frankfurt, Germany. The number of mediators will be one (1). The language of the mediation proceeding will be English. If the dispute has not been settled pursuant to the said rules within [*****] following the filing of a request for mediation or within such other period as the Parties may agree in writing, either Party may submit the dispute to final and binding arbitration.

- 15.6.2 Any dispute relating to the validity, performance, construction or interpretation of this Agreement, which cannot be resolved amicably between the Parties after following the procedure set forth in Section 15.6.1, shall be submitted to arbitration in accordance with the Arbitration Rules of the Deutsche Institution für Schiedsgerichtsbarkeit e.V. ("**DIS Rules**"). The existence, nature and details of any such dispute(s), and all communications between the Parties related thereto, shall be considered Confidential Information of the Parties and shall be treated in accordance with the terms of Article 10 above. The decision of the arbitrators shall be final and binding upon the Parties (absent manifest error on the part of the arbitrator(s)) and enforceable in any court of competent jurisdiction. The location of arbitration will be Frankfurt, Germany. The arbitration will be heard and determined by one (1) arbitrator, who will be jointly selected by BI and CureVac. If, within [*****] following the date upon which a claim is received by the respondent, the Parties cannot agree on a single arbitrator, the arbitration will be heard and determined by three (3) arbitrators, with one arbitrator being appointed by each Party and the third arbitrator being selected by the two Party-appointed arbitrators. If either Party fails to select an arbitrator, or if the Party-appointed arbitrators cannot agree on a third arbitrator within [*****] of the respondent receiving the claim, such arbitrator will be appointed in accordance with the DIS Rules. The arbitration award that is consistent with the provisions of this Agreement that is so given will be binding upon the Parties, accompanied by a reasoned opinion in writing (in English), and the judgment on the award may be entered in any court having competent jurisdiction thereof. Each Party will bear its own costs and expenses (including its attorney's fees) associated with any arbitration initiated under this section, and each Party will bear an equal share of the arbitrators' and administrative fees associated with any arbitration initiated under this section. The language of the arbitration proceeding will be English. Notwithstanding the provisions of this Section 15.6.2, each Party shall have the right to seek preliminary or permanent injunctive relief in any court of competent jurisdiction as such Party deems necessary to preserve its rights and to protect its interests.
- 15.7 **Severability.** If any provision of this Agreement is determined by any court or administrative tribunal of competent jurisdiction to be invalid or unenforceable, the Parties shall negotiate in good faith a replacement provision that is commercially equivalent, to the maximum extent permitted by Applicable Laws, to such invalid or unenforceable provision. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of the other provisions of this Agreement. Nor shall the invalidity or unenforceability of any provision of this Agreement in one country or jurisdiction affect the validity or enforceability of such provision in any other country or jurisdiction in which such provision would otherwise be valid or enforceable.
- 15.8 **Entire Agreement and Amendments.** This Agreement, together with all Exhibits attached hereto, constitutes the entire agreement between the Parties regarding the subject matter hereof, and supersedes all prior agreements, understandings and communications between the Parties, with respect to the subject matter hereof, *provided, however*, that confidentiality agreements between of the Parties regarding the subject matter hereto and entered into before the Effective Date, including the reciprocal confidential disclosure agreement entered into by and between the Parties effective as of October 30, 2012, as amended by the 2nd amendment effective as of July 25, 2014, shall remain effective with respect to information exchanged between the Parties before the Effective Date. No modification or amendment of this Agreement shall be binding upon the Parties unless in writing and executed by the duly authorized representative of each of the Parties; this shall also apply to any change of this clause.

- 15.9 Waivers.** The failure by either Party hereto to assert any of its rights hereunder, including the right to terminate this Agreement due to a breach by the other Party hereto, shall not be deemed to constitute a waiver by that Party of its right thereafter to enforce each and every provision of this Agreement in accordance with its terms.
- 15.10 Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.
- 15.11 Independent Contractors.** The Parties are independent contractors and this Agreement shall not constitute or give rise to an employer-employee, agency, partnership or joint venture relationship among the Parties and each Party's performance hereunder is that of a separate, independent entity.
- 15.12 Language.** This Agreement, and any amendments or modifications thereto, shall be executed in the English language. No translation, if any, of this Agreement into any other language shall be of any force or effect in the interpretation of this Agreement or in determination of the intent of either of the Parties hereto.
- 15.13 Headings.** The headings are placed herein merely as a matter of convenience and shall not affect the construction or interpretation of any of the provisions of this Agreement.
- 15.14 Third Parties.** None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party which shall be a Third Party beneficiary to this Agreement.
- 15.15 Costs.** Except as is otherwise expressly set forth herein, each Party shall bear its own expenses in connection with the activities contemplated and performed hereunder.

- Signature page follows -

IN WITNESS WHEREOF, this Agreement has been signed by the Parties hereto in two (2) originals, each Party acknowledging receipt of one original.

CureVac GmbH

/s/ Dr. Florian von der Mülbe

Name : Dr. Florian von der Mülbe

Title : COO

CureVac GmbH

/s/ Ingmar Hörr

Name : Ingmar Hörr

Title : CEO

Boehringer Ingelheim International GmbH

ppa.

/s/ Dr. Stephan Lensky

Name : Dr. Stephan Lensky

Title : Corporate Vice President

Boehringer Ingelheim International GmbH

ppa.

/s/ Dorothee Schwall-Rudolph

Name : Dorothee Schwall-Rudolph

Title : Legal Counsel

Exhibit 1.3

BI Background Intellectual Property

[*****]

Exhibit 1.17

CureVac Background Intellectual Property

[*****]

Exhibit 1.23

CY9202 Specific Patent Rights

[*****]

EXHIBIT 1.34

REQUIREMENTS FOR INVOICES

[*****]

Exhibit 4.2

[*****]

Exhibit 4.3

Regulatory CMC DATA

[*****]

Exhibit 4.5A

[*****]

Exhibit 4.5B

**Specification of License Agreements between CureVac and the Ludwig Institute for
Cancer Research, the University of Zurich and Geneart AG**

[*****]

Appendix 2.3: Handling Protocol v 2.0SEP2013for CureVac Product(s)

[*****]

Appendix 3.5: IP Disclosure Letter

[*****]

Appendix 3.5

IP Disclosure Letter Regarding Manufacture of CureVac Product using the Manufacturing Process

[*****]

Appendix 5.2: Delivery Schedule

[*****]

Appendix 6.1a: Vial Price

[*****]

Appendix 6.1b: Calculation

[*****]

Appendix 6.4
Requirements for Invoices

[*****]

**Appendix 8.2:
Framework of QAA
(to be replaced by Quality Assurance Agreement)**

[*****]

**Appendix 13:
CUREVAC's commercial liability insurance**

[*****]

Exhibit 6.2A

BINDING TERM SHEET

Clinical Trial Supply

[*****]

Exhibit 6.2B

Binding Term Sheet for Commercial Supply

[*****]

Exhibit 11.2

Disclosures Regarding Representations and Warranties of CureVac

[*****]

REDACTED

Certain identified information, indicated by [*****], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Global Access Commitments Agreement

This Global Access Commitments Agreement (including all appendices, exhibits and attachments hereto, the “**Agreement**”), is entered into as of February 13, 2015 (“**Effective Date**”), by and between the Bill & Melinda Gates Foundation, a Washington charitable trust that is a tax-exempt private foundation (the “**Foundation**”), and CureVac GmbH, a German limited company, together with its Affiliates (“**CureVac**” or the “**Company**”), in connection with the Foundation making a program-related investment in the Company by acquiring Series B Shares of the Company issued from the Company as part of one or more capital increases (the “**Shares**”) (the acquisition of Shares is referred to herein as the “**Foundation Investment**”). The Foundation Investment is subject to the terms and conditions of the investment documents executed in connection with the closing (“**Closing**”), including, without limitation, this Agreement, and the Investment and Shareholders’ Agreement (the “**Shareholders’ Agreement**”) among the Company’s shareholders, dated February 13, 2015, and related documents, in each case as amended from time to time (collectively, the “**Investment Documents**”). Capitalized terms not defined herein shall have the same meaning as in the Investment Documents. The Foundation and Company are each referred to as a “**Party**” and collectively as the “**Parties**”. In consideration of the Foundation making the Foundation Investment on the terms and conditions in the Investment Documents, and for other good and valuable consideration, the undersigned hereby irrevocably agree as follows:

1. Charitable Purposes and Use of Funds

The Foundation is making the Foundation Investment as a “program-related investment” within the meaning of Section 4944(c) of the Code. The Foundation is committed to accelerating the development of lifesaving and low-cost vaccines and drugs to reduce the burden of disease in Access Countries in furtherance of its mission to help all people lead healthy, productive lives. The Foundation requires that the innovations, products and information developed with its funding be created and managed to ensure “**Global Access**” can be achieved, in particular that (i) knowledge gained using its funding be promptly and broadly disseminated and (ii) the intended products developed with its funding and owned or Controlled by the Company be made available and accessible at reasonable cost to people most in need in Access Countries. The Foundation’s primary purpose in making the Foundation Investment is to further the accomplishment of the Foundation’s charitable purposes, including securing Global Access rights to new, low-cost vaccines and drugs developed (in whole or in part) through the use of the Company’s Platform Technology and for certain selected Target Diseases and Conditions (collectively, the “**Charitable Purpose**”). In furtherance of the Charitable Purpose, the Foundation’s investment in the Company will secure the Global Access Commitments set forth below.

The Company agrees to use the funds from the Foundation Investment solely (a) to fund the Company’s new manufacturing facility which is planned to have the capacity to produce at least [*****] doses which inter alia can be used to manufacture vaccines and drugs in support of the Foundation’s Charitable Purpose, and which is described in Appendix 1 (“**New Facility**”) and/or (b) to continue development of the Company’s Platform Technology and use of the Platform Technology to advance drug and vaccine candidates in support of the Foundation’s Charitable Purpose.

2. Certain Definitions

The following terms shall have the following meanings:

(a) **“Access Countries”** means the countries (each an **“Access Country”**) on the World Bank list of low-income and lower middle-income economies (<http://www.worldbank.org/data/countryclass/classgroups.htm>) on the Effective Date, which are set forth on Appendix 2. If after the Effective Date a country which was an Access Country on the Effective Date (i) is removed from such list and (ii) if such country becomes part of the European Union or is subject to another treaty with other non-Access Countries which leads to a material increase of the risk of parallel imports, the Parties will cooperate in good faith to reasonably reduce the risk of parallel imports and if it is not possible to reduce the risk to a degree that is acceptable to both Parties, such country will be removed from the list of Access Countries for purposes of this Agreement.

(b) **“Access Country Doses”** means vaccines and drugs the Company has developed using funds from the Foundation or Foundation-supported Entities in connection with Projects and that are intended for use in the Access Countries (including, without limitation, vaccines and drugs for use in clinical trials).

(c) **“Affiliate”** means, as to any Person, any other Person that directly or indirectly controls, or is under common control with or is controlled by such Person, provided, however, that regarding CureVac, Affiliate shall not include Mr. Hopp and Dievini Hopp biotech holding GmbH & Co. KG and/or any other companies controlled by Mr. Hopp and/or Dievini Hopp biotech holding GmbH & Co. KG.

(d) **“Change in Control”** means (i) the acquisition after the date of this Agreement, directly or indirectly, by any Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) of the beneficial ownership of securities of the Company possessing more than 50% of the total combined voting power of all outstanding voting securities of the Company; (ii) a merger, consolidation or other similar transaction involving the Company, except for a transaction in which the holders of the outstanding voting securities of the Company immediately prior to such merger, consolidation or other transaction hold, in the aggregate, securities possessing more than 50% of the total combined voting power of all outstanding voting securities of the surviving entity immediately after such merger, consolidation or other transaction; or (c) the sale, transfer, license or other disposition (in one transaction or a series of related transactions) of all or substantially all of the assets of the Company.

(e) **“Charitable Purpose”** has the meaning given in Section 1.

(f) **“Charitability Default”** means any event in which Company:

(i) commits a material breach of the Global Access Commitments;

(ii) fails to comply with the restrictions on the use of funds set forth in this Agreement; or

(iii) fails to comply with the U.S. tax code-related obligations set forth in Sections 9, 11 and 13 below.

(g) **“Claim”** has the meaning set forth in Section 6.

(h) “**Code**” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

(i) “**COGS**” means [*****]. In the event the Company and the Foundation are unable to agree on the COGS amount for a Product within [*****], then the determination of COGS will be made by an independent internationally recognized accounting firm mutually acceptable to the Company and the Foundation that does not provide accounting services to the Company or the Foundation and that has expertise in calculating COGS for a pharmaceutical product.

(j) “**COGS Methodology Handbook**” means the methodology described in the “COGS Principles & Assessment Methodology Handbook” and the “COGS Handbook Appendix A Template Tables” attached at Appendix 3.

(k) “**Commitment Period**” means the period from the Effective Date until the date on which all funds received from the Foundation pursuant to the Investment Agreements have been expended in accordance with the terms of this Agreement.

(l) “**Competitor**” means a company engaged in the development of RNA vaccines and/or drugs.

(m) “**Control**” means with respect to the subject item, the possession (whether by ownership or license) by a Party of the ability to grant to the other Party access or a license as provided herein under such item or right without violating the terms of any agreement or other arrangements with any third party.

(n) “**Cure Period**” has the meaning set forth in Section 8(a).

(o) “**Developed Country**” means any country that is not an Access Country (collectively, the “**Developed Countries**”).

(p) “**Dispute**” has the meaning set forth in Section 4.

(q) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended (and any successor thereto) and the rules and regulations promulgated thereunder.

(r) “**Existing Agreements**” means the collaboration agreements between the Company and third parties as such agreements exist on the Effective Date, which are listed on Appendix 4.

(s) **“Foundation-supported Entity”** means an entity that receives funding, directly or indirectly, from the Foundation, collaborates with the Foundation, or both, for the purpose of accomplishing the Foundation’s charitable objectives. For the avoidance of doubt, the Company will not be required to collaborate with and/or provide confidential information or rights to a Foundation-supported Entity that is a Competitor of the Company unless the Company determines to its reasonable satisfaction that such information is or rights are, as the case may be, protected by an appropriate confidentiality agreement and such information or rights will only be used by the Foundation-supported Entity in connection with and solely for achieving the Charitable Purpose.

(t) **“Funded Developments”** means products, services, processes, technologies, materials, software, data, other innovations, and intellectual property developed using funds from the Foundation in connection with any Project.

(u) **“GAAP”** means Generally Accepted Accounting Principles in the United States.

(v) **“Global Access”** has the meaning set forth in Section 1.

(w) **“Global Access Commitments”** has the meaning set forth in Section 3.

(x) **“Global Access License”** has the meaning set forth in Section 3(d).

(y) **“Indemnitees”** has the meaning set forth in Section 6.

(z) **“Listed Person”** has the meaning set forth in Section 155.

(aa) **“New Facility”** has the meaning given in Section 1.

(bb) **“Option Agreement”** means the agreement between the Company and [*****], which is listed in Appendix 4, as such agreement existed on the Effective Date.

(cc) **“Person”** means any individual, partnership, corporation, limited liability company, association, trust, joint venture, unincorporated organization or other legal entity.

(dd) **“Platform Technology”** means the Company’s technology for development of prophylactic and therapeutic mRNA vaccines and drugs against infectious diseases and vaccine adjuvants, comprised of long, non-coding RNA molecules and formulation/delivery technology necessary to develop the mRNA vaccines and drugs. For the avoidance of doubt, the intent of the Parties is that development activities will include the full process from pre-clinical development to delivery of Product.

(ee) **“Product”** means any drug or vaccine that is developed pursuant to a Project.

(ff) **“Project”** has the meaning set forth in Section 3(a)(i).

(gg) **“Project Commencement Period”** means the period ending on the 10-year anniversary of this Agreement.

(hh) **“Target Diseases and Conditions”** means [*****].

(ii) **“Total Manufacturing Capacity”** means Company’s capacity in vials based on its ability over any time period to manufacture and produce vaccines and/or drugs at its New Facility, which shall be forecasted and determined on a rolling quarterly basis.

(jj) “Withdrawal Rights” has the meaning set forth in Section 8(a).

3. **Global Access Commitments**

As a condition to the Foundation making the Foundation Investment at the initial closing and committing to invest a subsequent tranche, subject to the terms and conditions of the Investment Documents, and to ensure satisfaction of the Charitable Purpose, the Company agrees to the following “**Global Access Commitments**”. Unless the Parties and [*****] agree otherwise, if the Parties would agree on a Project which relates to an [*****] non-exclusive pathogen under the Option Agreement, the Global Access Commitments hereunder would be subject to the rights granted to [*****] under the Option Agreement.

(a) **Vaccine and Drug Development Projects.**

(i) The Company will work together with the Foundation on all stages of vaccine and drug development and commercialization for Target Diseases and Conditions. Each Project will be documented in a definitive agreement between the Foundation or a Foundation-supported Entity which Project is chosen by the Foundation and approved by the Company (such approval not to be unreasonably withheld or delayed) for such Project and the Company and a project plan (each a “**Project**”), which may include work to be undertaken, responsibilities, participation by other parties, timelines and milestones, project management, contributions in-kind and funding requirements, a product development and marketing plan, product registration in the Access Countries, any additional global access commitments specific to the Project, terms for manufacturing and commercialization of Access Country Doses and the price for Access Country Doses, which must be an affordable price for sales for use in the Access Countries that the Parties agree will not exceed [*****]. The Company will permit the Foundation or a representative designated by the Foundation to reasonably inspect twice every [*****] during regular business hours and at the Foundation’s cost the Company’s books and records as well as manufacturing documentation (including but not limited to the detailed bill of materials) for the purpose of determining cost of goods sold for each Product.

(ii) The Foundation - and the Company, under the conditions set forth below - will contribute in kind or through funding to agreed-upon Projects. The specific level and allocation of funding responsibilities for a specific Project will be decided on a Project-by-Project basis as mutually agreed in good faith in writing by the Parties based on a fair allocation of the expected benefits. For the avoidance of doubt, if a Project serves solely the Foundation’s charitable purposes, the expectation of the Parties is that the Foundation will fully fund the direct costs associated with such specific Project. The Company agrees that as part of the Global Access Commitments, it will accept and work on three Projects proposed by the Foundation at a time, subject to the Foundation or a Foundation-supported Entity selected by the Foundation and approved by the Company (such approval not to be unreasonably withheld or delayed) for such Project agreeing to pay its proportionate share of the funding responsibilities associated with such Projects. If the Company is working on three Foundation (or Foundation-supported Entity) Projects, then the Company will not be required to commence work on a new Project until one of the three Projects has been completed, terminated or if the Parties agreed to put a Project on hold in accordance with the terms of such Project; provided that the Company and the Foundation can work on more than three Projects in parallel if they mutually agree to do so. A Project is deemed to be completed if, as set forth in the respective project plan, no more work is to be performed on the Project by Company or its sublicensees, contractors or other collaborators. Any Project which has been terminated or put on hold shall no longer be considered an active Project for purposes of this Agreement. For the avoidance of doubt, there is no limitation on the number of Projects the Foundation can request the Company to perform (subject to the requirement that the Company is not required to work on more than three Projects at a time); provided that the Company is not obligated to accept an additional Project if the start of the proposed Project is scheduled to be after the expiry of the Project Commencement Period, but if a Project is commenced prior to the end of the Project Commencement Period, the Company will continue such Project to completion, even if this occurs after the end of the Project Commencement Period, provided, however, that the Foundation has no right to request to increase the scope of work after the end of the Project Commencement Period without the Company’s consent.

(iii) Unless provided otherwise in a specific Project Agreement (as defined below), the Parties agree that any results, information, invention, patent right and other intellectual property right and any know how generated by or on behalf of the Company with respect to the Platform Technology and/or the Funded Developments shall be owned by the Company and the Company shall be responsible, in its sole discretion, to file, prosecute, maintain and defend such intellectual property rights.

(iv) The Company further agrees that it will not reject any Projects proposed by the Foundation unless the Company can demonstrate that accepting such Project would be reasonably likely to have a material adverse effect on the Company (“**Good Reason**”). By way of example, the Company agrees that it will not constitute Good Reason for the Company to reject a Project because the Company could make a higher profit by performing other work, but the Company will not be required to accept a Project on terms that would cause the Company to operate at a loss without any offsetting benefit.

(b) Access to Project Data and Information. Subject to Existing Agreements, the Company will [*****] to:

(i) Publish the results and information developed in connection with each Project within a reasonable period of time after such information or results are obtained in a manner that satisfies the requirement that such research be published in a form that is “available to the interested public” as described in Treasury Regulation 1.501(c)(3)-1(d)(5)(iii)(c)(2), which could include publication in a treatise, thesis, trade publication or a scientific journal, the presentation of a paper at a research conference or symposium and electronic publication, with due regard to delays or limitations on content of such publications that are necessary or useful (i) to protect the Company’s intellectual property, trade secrets and confidential information covering, inter alia, the Platform Technology itself and/or (ii) to allow the Company to obtain any intellectual property rights based on the results and information developed in connection with each Project.

(ii) Promptly provide to the Foundation from time to time, upon the Foundation’s request and with the agreement of the relevant Foundation-supported Entity (as appropriate), access to data and information regarding each Project, subject to the conclusion of a confidential disclosure agreement among the Foundation, the Company and, as necessary and appropriate and only upon the Company’s prior written consent (not to be unreasonably withheld or delayed) the relevant Foundation-supported Entity.

(iii) Promptly provide to the Foundation from time to time, upon the Foundation’s request, rights to share data and information developed in connection with each Project, with due regard to the need to protect confidential information and to avoid untimely public disclosures that may bar access to patent protection or public disclosures that may undermine trade secret protection.

(c) Manufacture of Access Country Doses. The Company agrees to manufacture Access Country Doses in an amount based on a rolling forecast provided by the Foundation to the Company of expected demand for Access Country Doses up to a maximum of [*****] of its New Facility Total Manufacturing Capacity (or the reasonable equivalent thereof in the event the New Facility is combined with or replaced by other manufacturing facilities, including, without limitation, as a result of a Change in Control). For such purpose, the Foundation will provide the Company with at least [*****] prior notice before it is required to begin manufacturing Access Country Doses. Unless and until such notice has been given by the Foundation, the Company will have the right to allocate 100% of its New Facility Total Manufacturing Capacity at the Company’s discretion. For the avoidance of doubt, the Company will not be required to manufacture vaccines and drugs that have been developed by third parties (other than Foundation-supported Entities participating in any Project as provided above) unrelated to the Company using funds received from the Foundation.

(d) **Non-exclusive License.** Subject to the Existing Agreements, in connection with and relating solely to each Project the Company will grant the Foundation a worldwide, non-exclusive, perpetual, irrevocable, fully-paid up, royalty-free license to the Funded Developments and the background intellectual property Controlled by the Company that is covering the Platform Technology to the extent reasonably required to use, research, develop, make, sell, and offer-for-sale the Funded Developments for the specific Project, including the Products developed under such Project (the “**Global Access License**”), but any development, manufacture, sale, offer-for-sale, importation or distribution of products is limited to importation into and distribution to people in Access Countries in a manner consistent with the Foundation’s charitable purpose; provided that the Global Access License will only come into force (condition precedent) in the event of the Company’s insolvency, dissolution or an uncured Charitability Default (Section 8(a) shall apply accordingly). The Global Access License is sublicensable to (i) Foundation-supported Entities, (ii) to CROs and CMOs acting on behalf of the Foundation or the Foundation-supported Entities or (iii) to third party licensees of the Company who have entered into a collaboration and license or asset transfer agreement with the Company with respect to a pathogen covered under a Project, provided, however, that if such third party licensee refuses to enter into a sublicense agreement with the Foundation in spite of a good faith approach of the Foundation to conclude such sublicense agreement, the Foundation may grant a sublicense to any other third party. Any agreement to be concluded in the future under the Existing Agreements will have to respect and cannot limit or restrict the Global Access Commitments.

(i) The Company agrees to take such further actions, including technology transfer, as would be typical industry practice at the time for a company providing a license to a third party, to ensure that the Foundation (or its potential permitted sub-licensee) can effectively take advantage of the Global Access License if a triggering event occurs. Without limiting the foregoing, in connection with any Global Access License hereunder, the Company will take any actions reasonably necessary to grant the Foundation a license or sub-license to any third-party intellectual property applicable to the Platform Technology or the Funded Developments that is necessary to enable the Foundation to effectively take advantage of the Global Access License for the selected Projects.

(ii) Subject to the Existing Agreements, the Company shall permit the Foundation (or its sublicensees) the right to access and cross-reference any applicable IND, BLA or regulatory file Controlled by Company and relating to any Projects and shall, upon request, provide an electronic copy of each such file.

(e) The Global Access Commitments will be ongoing and will continue for as long as the Foundation continues to pursue its charitable mission except that the Company’s obligation to accept additional Projects (in lieu of abandoned Projects) will terminate upon expiry of the Project Commencement Period.

(f) The Company will provide to the Foundation the reports regarding program-related investments and such other reports as may be agreed upon between the Company and the Foundation and reasonable audit rights regarding the Company’s compliance with the use of the Foundation’s funds and the Global Access Commitments.

(g) Except for rights granted in the Existing Agreements as of the Effective Date, the Company will not grant to a third party any rights or enter into any arrangements or agreements that would limit or restrict the Foundation's rights related to the Global Access Commitments, including the Foundation's right during the Project Commencement Period to enter into Projects with the Company with respect to any Target Diseases and Conditions. For the avoidance of doubt, nothing in this Agreement prohibits the Company from entering into an agreement with a third party with respect to the development, manufacture and commercialization of a product for a Target Disease and Condition provided that such agreement does not limit or restrict the Company's ability to fulfill the Global Access Commitments, and the Foundation's consent will not be required for such an agreement. In order to confirm that CureVac's agreements with third parties relating to any Target Disease and Condition do not limit or restrict the Foundation's rights, CureVac agrees that it will include language substantially similar to the following in such agreements:

The Company and [third party] acknowledge that the Company and the Bill & Melinda Gates Foundation (the "Foundation") have entered into a Global Access Commitments Agreement (the "Global Access Agreement") pursuant to which the Company has agreed to work together with the Foundation on vaccine and drug development for certain Target Diseases and Conditions pursuant to the terms of the Global Access Agreement and any subsequent agreements entered into by the Company with respect to a particular project (each, a "Project Agreement"). The Company and [third party] agree that this [third party agreement] shall be subject to the terms of the Global Access Agreement and in no way shall this [third party agreement] limit or restrict the Foundation's rights or the Company's obligations pursuant to the Global Access Agreement or any existing Project Agreement. The Company and [third party] agree that the Foundation is a third party beneficiary of this provision and will have the right to enforce this provision in order to protect the Foundation's rights pursuant to the Global Access Agreement and any applicable Project Agreements. For the avoidance of doubt, unless otherwise agreed with the [third party], the Foundation has no claims to the results generated and to the intellectual property rights and know how Controlled by [third party]; provided that nothing in this [third party agreement] will limit or restrict the Global Access Commitments.

In the event the Company collaborates with a third party with respect to any Target Disease and Condition that becomes the subject matter of a Project hereunder, the Foundation and the Company will negotiate in good faith with such third party to attempt to combine the development efforts and align the respective project plans; provided that if the Foundation and the third party cannot reach agreement, the Foundation and the Company can proceed with such Project in accordance with the terms of this Agreement and the applicable Project Agreement.

(h) The Company and BMGF will mutually use reasonable and diligent efforts to execute and cause [*****] to execute an amendment substantially in the form attached hereto as Appendix 5, to the Option Agreement dated as of [*****] by and between the Company and [*****] as soon as reasonably possible.

4. **Representations, Warranties, Covenants of the Company**

The Company hereby represents, warrants and covenants to the Foundation:

(a) **Project Diligence and Necessary Skill.** The Company will use all reasonable and diligent efforts to perform its obligations under a Project Agreement and to complete each Project and the Company has, and will maintain, the necessary expertise, personnel, facilities and equipment to perform each Project and its obligations under the Investment Documents.

(b) Continuation of Business. The Company will continue activity in those lines of business or in comparable new lines of business that are necessary to complete the Projects and to fulfill the Global Access Commitments for the Projects.

(c) Compliance with Applicable Laws & Regulations. The Company is in compliance and will remain in compliance in all material respects with all applicable laws and regulations (including all laws and regulations related to clinical trials, human health and safety, the protection of the environment, research, development and manufacture of vaccines and drugs intended for human use) necessary to enable the Company to perform its obligations under the Investment Documents and in connection with each Project, and as of the Effective Date the Company is not aware of any action filed or commenced against the Company alleging any failure to comply. The Company is and will remain in compliance with all applicable cGMPs, Good Clinical Practices, Good Laboratory Practices and Good Industry Practices. The Company is not aware of facts that (with or without notice or lapse of time, or both) could reasonably be expected to result in the Company being in violation in any material respect of any law materially applicable to the Company's performance of its obligations under the Investment Documents and in connection with each Project. The Company has in place and shall continue to maintain for the duration of its obligations under this Agreement and each Project, a compliance program reasonably designed to identify, prevent, and address any compliance issues.

(d) Licenses and Permits. The Company currently holds and will continue to hold all necessary foreign, federal, state, local and other governmental licenses, approvals and permits necessary to perform its obligations under the Investment Documents and in connection with each Project.

(e) Records Compliance. The Company will maintain, in accordance with and for the period required under cGMPs and applicable laws, complete and adequate records of the Funded Development pertaining to the methods, and the facilities, manufacture, procedures, testing and the like, related to each Project.

(f) IP Due Diligence. On the Effective Date, the Company has conducted commercially reasonable due diligence with respect to the Project Agreements, including intellectual property and freedom to operate analyses related to the Project Agreements. To the Company's knowledge on the Effective Date it owns or possesses sufficient legal rights to all trademarks, service marks, tradenames, copyrights, trade secrets, licenses, information and proprietary rights and processes and all patents necessary for its current business without any conflict with, or infringement of, the rights of others. On the Effective Date, the Company has not received any communications alleging that the Company has violated or, by conducting its business, would violate any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets or other proprietary rights or processes of any other Person.

(g) Product Modification. In the event of any injunction or prohibition against the Company's manufacture, licensure, import, export, sale, offer-for-sale, distribution, or use of any Product by reason of infringement of a patent, proprietary, or intellectual property right, or if in Company's opinion any Product is likely to become the subject of a claim of infringement of a patent, proprietary, or intellectual property right the Company and the Foundation and/or the Foundation-supported Entity will, either: (a) procure (such as by licensing or otherwise) the right to continue to make, have made, import, export, sell, offer-for-sale, distribute, and use such Product, or (b) replace or modify such Product so it becomes non-infringing, but is equivalent or superior in terms of efficacy, quality and safety.

(h) No Disputes. The Company agrees to notify the Foundation of any claims with regard to any third party intellectual property or disputes with a third party with regard to a Product which arise during the term of this Agreement (including its commercialization, manufacture, sale, offer for sale, distribution, import, export and use as contemplated by the applicable Project).

(i) **Disqualification and Debarment.** On the Effective Date, the Company, its employees or contractors or agents are not and the Company will undertake reasonable efforts not to be, at the time of performance of any activity contemplated by this Agreement or in connection with any Project, (a) disqualified or debarred by any Governmental Authority for any purpose pursuant to applicable law or regulation or threatened with any such disqualification or debarment or (b) charged or convicted for conduct relating to the development or approval of, or otherwise relating to the regulation of, any Product under any applicable law or regulation.

(j) **Warranty.** Each Product is or will be manufactured by the Company (and/or its CMOs or partners) in conformity in all material respects with all applicable requirements of a vaccine or drug for human use, including all express and implied warranties related thereto.

(k) **Company is Sponsor.** In no event shall the Foundation be a sponsor of any trial, study, Product, registration, or marketing authorization or the like. Except as may be required by law, the Company shall not include the Foundation on any document relating to the foregoing or in any communication with any governmental or regulatory body without the express prior written consent of the Foundation. Any input, consultation, or communication to the Company by the Foundation or any Foundation-supported Entity shall not diminish the foregoing.

(l) **Insurance.** The Company will maintain liability, property, casualty, flood, and other insurance coverage (including product liability, clinical trial insurance) by such insurers and in such forms and amounts and against such risks as are generally consistent with the insurance coverage maintained by similarly-situated companies in like industries, including to address any risks applicable to the Projects.

(m) **Compliance with Confidentiality Obligations; No Infringement.** The Company shall perform its activities under this Agreement and in connection with each Project using reasonable efforts to prevent violation of any of its confidentiality obligations to any third party and violation or infringement of any third party trade secrets, patent rights or other intellectual property rights.

(n) **Full Power.** The Company has the full and unrestricted power and authority to enter into this Agreement, to perform its activities under this Agreement and in connection with each Project, and to disclose any information which it makes available to the Foundation under this Agreement or in connection with any Project.

5. **Representations, Warranties, Covenants of the Foundation**

The Foundation hereby represents, warrants and covenants to the Company:

(a) **Full Power.** The Foundation has the full and unrestricted power and authority to enter into this Agreement, to perform its activities under this Agreement and in connection with each Project, and to disclose any information which it makes available to the Company under this Agreement or in connection with any Project.

(b) **Compliance with Confidentiality Obligations; No Infringement.** The Foundation shall perform its activities under this Agreement and in connection with each Project using reasonable efforts to prevent violation of any of its confidentiality obligations to any third party and violation or infringement of any third party trade secrets, patent rights or other intellectual property rights.

(c) **Use of Product in Access Countries Only.** The Foundation acknowledges that the Company intends to take reasonable and diligent efforts to ensure that the Products intended for use in the Access Countries will be utilized in Access Countries only and to prevent parallel imports of such Products into non-Access Countries, which efforts may include the Company placing an indication on the packaging of the Products that they are for use in Access Countries only and are not to be exported into any other countries. If the Company reasonably believes that parallel imports of such Products outside the Access Countries are occurring, the Company will notify the Foundation and the Parties will cooperate in good faith to verify the circumstances and take such reasonable action as they mutually agree is necessary; provided that the Foundation will not be responsible for the actions of any third party or any actions outside of its control. For the avoidance of doubt and unless otherwise agreed, the Company is not required to arrange for the commercialization of Products in the Access Countries.

6. Indemnification

The Company will indemnify, hold harmless, and defend the Foundation and its co-chairs, trustees, directors, officers, employees, agents, representatives, consultants and grantees (collectively, the “**Indemnitees**”) from and against any and all third party causes of action, claims, suits, legal proceedings, judgments, settlements, damages, penalties, losses, liabilities and costs (including reasonable attorneys’ fees and costs) (each a “**Claim**”) arising out of or relating to: (a) negligence or wilful misconduct of the Company (including its officers, agents, employees, subgrantees, contractors or subcontractors) in connection with any Project; (b) bodily injury, death or property damage caused by any Project or Product; or (c) a material breach by the Company of any of its obligations, representations, warranties, or covenants under this Agreement or a Project Agreement, except, in each of the foregoing cases, the Company will have no obligation to indemnify, defend, or hold harmless the Foundation for any liability, loss, or expense to the extent resulting from the gross negligence or willful misconduct on the part of the Foundation.

The Company will have control over the defense and settlement of each Claim, with counsel of its own choosing; provided that the Company conducts the defense actively and diligently at the sole cost and expense of the Company and provided further that the Company will not enter into any settlement that adversely affects any Indemnitee without the applicable Indemnitee’s prior written consent, such consent not to be unreasonably withheld or delayed. The Foundation will provide the Company, upon request and at no charge, with reasonable cooperation in connection with the defense and settlement of the Claim. Subject to the Company’s rights above to control the defense and settlement of Claims, the Foundation and any Indemnitee may, at its own expense, employ separate counsel to monitor the defense of any Claim.

7. Survival of Rights

As a condition of any acquisition of the Platform Technology or the Company’s manufacturing facilities directly, or through a Change in Control, the Global Access Commitments described above will survive and be assumed by the acquirer to the extent required to carry out the Global Access Commitments, and the Foundation shall have the right to review such provisions of the written agreement with such third party that relate to the assumption of the Global Access Commitments to confirm that the Global Access Commitments will survive and be assumed by the acquirer to the extent required to carry out the Global Access Commitments, and the Company will not grant to a third-party any rights to, or enter into any arrangements with respect to, the Platform Technology or its manufacturing facilities to the extent such rights or arrangements would prevent the Company (or any acquirer of the Platform Technology or manufacturing facilities) from fulfilling the above stated Global Access Commitments.

In order to confirm the Global Access Commitments will survive and be assumed by the acquirer, the Company will add language substantially similar to the following to its acquisition agreements with third parties:

The Company and [third party] acknowledge that the Company and the Bill & Melinda Gates Foundation (the “Foundation”) have entered into a Global Access Commitments Agreement (the “Global Access Agreement”) pursuant to which the Company has agreed to certain Global Access Commitments pursuant to the terms of the Global Access Agreement and subsequent agreements entered into by the Company with respect to particular projects (each, a “Project Agreement”).

[Third party] agrees that the Global Access Agreement will continue in full force and effect following consummation of the transactions contemplated by this [acquisition agreement] and [third party] will ensure performance of the terms of the Global Access Agreement and that in no way shall this [third party agreement] limit or restrict the Foundation’s rights or the Company’s obligations pursuant to the Global Access Agreement or any existing Project Agreement. The Company and [third party] agree that the Foundation is a third party beneficiary of this [third party agreement] with respect to the Global Access Commitments and will have the right to enforce this provision in order to protect the Foundation’s rights pursuant to the Global Access Agreement and any applicable Project Agreements.

8. Withdrawal Right, Termination for Good Cause

(a) **Charitability Default.** Each Party agrees that if it becomes aware of a Charitability Default it will promptly notify the other Party, and the Company shall thereafter provide to the Foundation a proposed strategy to remedy the Charitability Default, such strategy to be provided within [*****] of notification. Notwithstanding anything in this Agreement to the contrary, the Foundation will not lose any rights or remedies solely as a result of a failure to notify the Company after it becomes aware of a Charitability Default. In addition, the Company agrees to promptly notify the Foundation of any facts and circumstances it becomes aware of which - in its reasonable opinion - could reasonably cause a Charitability Default hereunder. If the Company fails to cure the Charitability Default within [*****] of notice of a Charitability Default (provided that such [*****] period will be extended by an additional [*****] if at the end of the [*****] period the Company demonstrates to the Foundation’s reasonable satisfaction that despite the Company’s reasonable and diligent efforts to cure the Charitability Default during the initial cure period, additional time is necessary) (the “**Cure Period**”), then, in addition to all other rights and remedies available at law or in equity, including the Global Access License set forth above and all other applicable remedies in the Investment Documents, the Foundation will have the withdrawal rights (the “**Withdrawal Right**”) set forth in the Shareholders’ Agreement.

(b) **Withdrawal Right.**

(i) The Company agrees that if for any reason the Withdrawal Right is removed from the Shareholders’ Agreement or the Shareholders’ Agreement is amended or terminated while this Agreement remains in effect, the terms of the Withdrawal Right will continue in full force and effect as if contained in this Agreement.

(ii) Notwithstanding any exercise of the Withdrawal Right, the Foundation will continue to be entitled to enforce its rights under the Global Access Commitments and in relation to any agreed Projects.

(iii) Irrespective of the Project Commencement Period, the Company has the right to terminate this Agreement without any survival of any provision of this Agreement for good cause if the Foundation does not make an initial investment in the Company (by payment into the capital reserves and the nominal capital of the Company) in the amount set forth in the definition of Financing Round I in the Shareholders’ Agreement (the “**Initial Investment**”) by [*****] and the default on payment of the Initial Investment is not cured within [*****] after the Foundation receives a respective payment request from the Company.

9. **Required Reporting**

In addition to any and all reports required to be delivered to the Foundation under the Investment Documents, the Company shall furnish, or cause to be furnished, to the Foundation the following reports and certifications:

(a) Within [*****] after the end of the Company's fiscal year during which the Foundation owns any shares of stock of the Company, a certificate from the Company signed by an officer or director of the Company and substantially in the form attached to this Agreement as Appendix 6, certifying that the requirements of the Foundation Investment were met during the immediately preceding fiscal year, describing the use of the proceeds of the Foundation Investment and evaluating the Company's development of the Platform Technology and use of the Platform Technology to advance drug and vaccine candidates in support of the Foundation's Charitable Purpose, and progress on the New Facility, and the Projects including, specifically, information regarding progress against the Global Access Commitments;

(b) Within [*****] after the end of the Company's fiscal year during which the Foundation ceases to own any shares of stock of the Company, a certificate from the Company signed by an officer or director of the Company and substantially in the form attached to this Agreement as Appendix 7, certifying that the requirements of the Foundation Investment were met during the term of the Foundation Investment, describing the use of proceeds of the Foundation Investment and evaluating the Company's development of the Platform Technology and use of the Platform Technology to advance drug and vaccine candidates in support of the Foundation's Charitable Purpose, and progress on the New Facility, and the Projects including, specifically, information regarding progress against the Global Access Commitments;

For the avoidance of doubt, if the Company has provided timely reports pursuant to Sections 9(a) and 9(b) that contain information sufficient to enable the Foundation to discharge any expenditure responsibility of the Foundation, within the meaning of Sections 4945(d)(4) and 4945(h) of the Code, with respect to the Foundation Investment, the Company will not be liable for a Charitability Default pursuant to Sections 9(a) or 9(b).

(c) Any other information respecting the operations, activities and financial condition of the Company as the Foundation may from time to time request to discharge any expenditure responsibility of the Foundation, within the meaning of Sections 4945(d)(4) and 4945(h) of the Code, with respect to the Foundation Investment, and to otherwise monitor the charitable benefits intended to be served by the Foundation Investment (the Foundation will pay the reasonable costs associated with preparing such information at its request);

(d) At least [*****], full and complete financial reports of the type ordinarily required by commercial investors under similar circumstances; and

(e) During the Project Commencement Period, within [*****] of the end of each calendar quarter, Company will (A) provide the Foundation with written reports in form and detail reasonably satisfactory to the Foundation and confer with the Foundation (by teleconference or in scheduled site visits as appropriate) regarding progress with respect to the Projects including information regarding progress against the Global Access Commitments and (B) coordinate with the Foundation to determine reasonable times for the Foundation's representatives to make site visits to the Company's facilities and to conduct any inspections with respect to the Projects. Such site visits may be conducted in [*****] by a consultant selected by the Foundation and approved by the Company (such approval not to be unreasonably withheld or delayed) who is subject to a confidentiality agreement that is reasonably acceptable to the Company and the Foundation.

10. Assignment by Foundation

Notwithstanding anything in this Agreement to the contrary, the Foundation will have the right to assign this Agreement to (a) any successor charitable organization of the Foundation from time to time that is a tax-exempt organization as described in Section 501(c)(3) of the Code, or (b) any tax-exempt organization as described in Section 501(c)(3) of the Code controlled by one or more trustees of the Foundation. The Foundation will notify the Company of any such assignment, including the identity of the assignee, in a timely manner. For the avoidance of doubt, if the Foundation transfers the Shares as permitted by this section, the Foundation may assign to any such transferee all of its rights attached to such Shares, including the Withdrawal Right.

11. Access to Records

The Company shall maintain books and records adequate to provide information ordinarily required by commercial investors under similar circumstances. The Company shall provide the Foundation or its designee(s) access at reasonable times to such books and records pertaining to the period during which the Foundation owned any shares of stock of the Company and continuing for a period of [*****] after the later of: (a) the date on which the Foundation no longer owns any shares of stock of the Company or (b) the date on which this Agreement is no longer in effect. Notwithstanding the foregoing, as long as the funds from the Foundation Investment are fully expended prior to the [*****] anniversary of the Effective Date, the Company shall not be required to maintain or provide the Foundation access to such books and records for more than [*****] from generation of the individual information. For the avoidance of doubt, the Foundation's access to records under this Section shall not be dependent upon the Foundation's percentage ownership in the Company.

12. Public Reports

The Foundation may include information about the Company in its periodic public reports to the extent such information is not confidential, except as otherwise may be required by applicable law.

13. Prohibited Uses

The Company shall not expend any proceeds of the Foundation Investment to carry on propaganda or otherwise to attempt to influence legislation, to influence the outcome of any specific public election or to carry on, directly or indirectly, any voter registration drive, or to participate or intervene in any political campaign on behalf of or in opposition to any candidate for public office within the meaning of Section 4945(d) of the Code. The proceeds of the Foundation Investment shall not (a) be earmarked to be used for any activity, appearance or communication associated with the activities described in the foregoing sentence, nor (b) be intended for benefit, and will not benefit, any Person having a personal or private interest in the Foundation, including descendants of the founders of the Foundation, or Persons related to or controlled by, directly or indirectly, such private interests.

14. Disqualified Person

To the knowledge of each of the Foundation and the Company: (1) the Company is not a “disqualified person” with respect to the Foundation (as the term “disqualified person” is defined in Section 4946(a) of the Code), and (2) no disqualified person with respect to the Foundation owns any of the Company’s outstanding stock, and (3) the Foundation does not, and one or more disqualified persons with respect to the Foundation do not, directly or indirectly, control Company.

15. Compliance with Anti-Corruption, Anti-Bribery and Anti-Terrorism Laws

The Company will not offer or provide money, gifts or any other thing of value, directly or indirectly, to anyone in order to improperly influence any act or decision relating to the sale of the Company’s products and services or the other matters contemplated by this Agreement, including by assisting any party to secure an improper advantage. Training and information on anti-bribery act compliance requirements is available here: www.learnfoundationlaw.org.

The Company will not use any proceeds of the Foundation Investment, directly or indirectly, in support of activities (i) prohibited by US laws related to combatting terrorism; (ii) with any Person on the List of Specially Designated Nationals (www.treasury.gov/sdn) (a “Listed Person”) or any Person that is, directly or indirectly, controlled by a Listed Person or in which a Listed Person, directly or indirectly, holds a significant ownership interest; or (iii) with or related to countries against which the US maintains a comprehensive embargo (currently, Cuba, Iran, (North) Sudan, Syria, and North Korea), unless such activities are fully authorized by the US government under applicable law and specifically approved by the Foundation in its sole discretion.

16. Use of Name

Each of the Foundation and the Company may include information on this investment in its periodic public reports or other documents required to be filed with governmental authorities, if any. In addition, the Foundation and the Company may make the investment public at any time on their web pages and as part of press releases, public reports, speeches, newsletters and other public documents. Any announcement of the Foundation Investment by any other Person, will require the Company’s and Foundation’s prior written approval. Any other use of the Foundation’s or the Company’s name or logo in any respect depends upon their respective pre-approval in writing. Notwithstanding the foregoing, the Foundation’s name and logo will not be used by any Person in any manner to market, sell or otherwise promote the Company, its products, services and/or business.

17. Entire Agreement; Modification

This Agreement and the other Investment Documents, including all exhibits hereto and thereto, the Confidentiality Agreement executed between the Parties on June 6, 2012, and the Project Agreements set forth all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties with respect to the subject matter of the Investment Documents, and supersede and terminate all prior agreements, negotiation and understandings between the Parties, whether oral or written, with respect to such subject matter. No subsequent alteration, modification, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by the respective authorized officers of the Parties. For the avoidance of doubt, to the extent any other Investment Document conflicts with any provisions of this Agreement that are required by the Code, the provisions of this Agreement shall control.

18. Confidentiality

(a) During the course of this Agreement and the Project Agreements each Party (as a “**Disclosing Party**”) may disclose certain Confidential Information owned or rightfully possessed by it to the other Party (as the “**Receiving Party**”). For the purposes of this Agreement, “**Confidential Information**” means all information, including data, communicated by the Disclosing Party to the Receiving Party in either (i) a documentary or written form, marked as confidential, or (ii) in an oral form, in which case a written record, marked as confidential, shall be provided to the Receiving Party within [*****] of the oral disclosure for the information to be considered as Confidential Information; provided that a written record of an oral disclosure will not be required if based on the nature of the information or circumstances surrounding its disclosure, the Receiving Party should reasonably regard such information as Confidential Information.

(b) Each Party, as a Receiving Party, agrees that it will (i) use the Confidential Information received from a Disclosing Party solely for the purposes contemplated by this Agreement and the Project Agreements and (ii) treat the Confidential Information of the Disclosing Party as it would treat its own confidential information but in no event less than reasonable care to avoid disclosure of the Confidential Information to any third party (which, for the avoidance of doubt, includes any Foundation-supported Entities), person, firm or corporation that is not bound by confidentiality and restricted use obligations at least as strict as those set out herein or as otherwise expressly stated herein.

(c) Notwithstanding anything to the contrary in this Agreement, the Receiving Party shall have no obligation with respect to the Confidential Information received from a Disclosing Party to the extent such information is and which the Receiving Party is clearly able to demonstrate: (i) already known by the Receiving Party at the time of disclosure as evidenced by written documentation; (ii) publicly known, or subsequently becomes publicly known, without the wrongful act or breach of this Agreement by the Receiving Party; (iii) rightfully received by the Receiving Party from a third party having the lawful right to make such a disclosure, where said disclosure is rightfully made without any obligation of confidence to the Disclosing Party; (d) approved for release or disclosure by written authorization of the Disclosing Party; (e) independently developed by or for the employees or agents of the Receiving Party or its Affiliates without the use or knowledge of the Confidential Information provided by the Disclosing Party; or (f) required to be disclosed pursuant to any competent judicial or government request, requirement or order, provided that the Receiving Party so disclosing takes reasonable steps to provide the Disclosing Party with sufficient prior notice in order to allow the Disclosing Party to contest such request, requirement or order, and provided further that such Confidential Information is disclosed only subject to reasonably available restrictions on further disclosure and use, and otherwise remains subject to the obligations of confidentiality and restricted use set forth in this Agreement.

(d) Each Receiving Party shall be entitled to disclose the Disclosing Party’s Confidential Information to its employees, board members as well as its agents and consultants who are bound by confidentiality and restricted use obligations no less strict than those set out herein.

(e) Subject to exemptions and limitations elsewhere in this Agreement, the obligations of confidentiality of Confidential Information shall remain in effect for a period of seven years from the date the Confidential Information is communicated to the Receiving Party; provided that this period is extended to [*****] with regard to any Confidential Information disclosed pursuant to the DARPA-agreements, which information the Company has identified as being subject to such longer confidentiality period pursuant to the DARPA agreements.

(f) For the avoidance of doubt, the Confidential Disclosure Agreement entered into by the Parties effective as of June 6, 2012 (the “**Initial Confidentiality Agreement**”), and Article 6 (“Confidentiality”) of the Framework Agreement for Cooperation entered into between the Parties effective December 11, 2013 (the “**Framework Agreement**”) are terminated as of the Effective Date. All Confidential Information (as defined in either the Initial Confidentiality Agreement or the Framework Agreement) that was disclosed by a Disclosing Party to a Receiving Party prior to the Effective Date, is deemed to be Confidential Information as defined in and for purposes of this Agreement and is subject to the protections and terms set forth herein for the term specified in this Agreement.

19. Specific Performance

The Company acknowledges and agrees that the Foundation would be damaged irreparably in the event any of the provisions of this Agreement are not performed in accordance with their specific terms or otherwise are breached or violated. Accordingly, the Company agrees that the Foundation will be entitled to seek an injunction or injunctions to prevent breaches or violations of the provisions of this Agreement and to enforce specifically this Agreement and the terms and provisions hereof in any action instituted in any court having jurisdiction over the Parties and the matter in addition to any other remedy to which it may be entitled, at law or in equity. The Company further agrees that, in the event of any action for specific performance in respect of such breach or violation, it will not assert the defense that a remedy at law would be adequate.

20. Authority

Each of the Company and the Foundation covenants, represents and warrants with respect to itself that it has all authority necessary to execute this Agreement and that, on execution, this Agreement will be fully binding and enforceable in accordance with its terms, and that no other consents or approvals of any other Person or third parties are required or necessary for this Agreement to be so binding.

21. Governing Law

This Agreement is made pursuant to, and shall be construed and enforced in accordance with, the laws of the State of New York, U.S.A. irrespective of the principal place of business, residence or domicile of the Parties hereto and without giving effect to otherwise applicable principles of conflicts of law that would give effect to the laws of another jurisdiction.

22. Expenses

Each of the Parties shall bear and pay for all of its own costs, fees and expenses (including legal, accounting and other professional or advisory fees and expenses) incurred or to be incurred by it, in each case, in negotiating and preparing this Agreement.

23. Dispute Resolution

The Parties will resolve any dispute, controversy or claim arising out of or relating to this Agreement, or the breach, termination or invalidity hereof (“**Dispute**”) in accordance with this Section 23.

(a) [*****]

(b) [*****]

[*****]

(c) [*****]

(d) [*****]

24. Waiver

Failure or delay by either Party in exercising or enforcing any provision, right, or remedy under this Agreement, or waiver of any remedy hereunder, in whole or in part, shall not be deemed a waiver thereof, or prevent the subsequent exercise of that or any other rights or remedy.

25. Further Assurances

From time to time after the Effective Date, each Party shall execute, acknowledge and deliver to each other any further documents, assurances, and other matters, and will take any other action consistent with the terms and conditions of this Agreement, that may reasonably be requested by a Party and necessary or desirable to carry out the purpose of this Agreement.

26. Interpretation

The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation.”

27. Counterparts

This Agreement may be executed in one or more counterparts, including by signatures delivered by facsimile or pdfs, each of which shall be deemed an original, but all of which shall be deemed to be and constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Global Access Commitments Agreement to be executed by their duly authorized representatives as of the date first written above.

CUREVAC GMBH

By: /s/ Ingmar Hoerr

Name: Ingmar Hoerr

Title: CEO

BILL & MELINDA GATES FOUNDATION

By: /s/ Jim Bromley

Name: /s/ Jim Bromley

Title: CFO

Appendix 1

New Facility

Appendix 2

Access Countries

[***]**

Appendix 3
COGS Methodology

Appendix 4
Existing Agreements

Appendix 5

Form of Amendment to Option Agreement

Appendix 6

[OFFICER'S/DIRECTOR'S] CERTIFICATE

CUREVAC GMBH

[DATE]

This certificate is being delivered by CureVac GmbH is a private, for-profit company having its business address at Paul-Ehrlich-Str. 15, 72076 Tübingen (the "Company"), pursuant to Section 9(a) of the Global Access Commitments Agreement between the Company and the Bill & Melinda Gates Foundation dated as of [] (the "Agreement"). Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to them in the Agreement.

The Company certifies as follows:

1. During the fiscal year ended [DATE], the Company met the requirements of the Foundation Investment as set forth in the Agreement that were required to be complied with or performed by the Company during such time period.
2. Attached as Exhibit A to this certificate is a description of the Company's use of proceeds of the Foundation Investment during the fiscal year ended [DATE].
3. Attached as Exhibit B to this certificate is the Company's evaluation of the Company's development of the Platform Technology and use of the Platform Technology to advance drug and vaccine candidates in support of the Foundation's Charitable Purpose, and progress with respect to the New Facility and Projects, including information regarding progress against the Global Access Commitments (as set forth in the Investment Documents) during the fiscal year ended [DATE].

IN WITNESS WHEREOF, the undersigned has executed this certificate and has caused this certificate to be delivered on the date first above written.

CureVac GmbH

By: _____
Name:
Title:

Appendix 7

[OFFICER'S/DIRECTOR'S] CERTIFICATE

CUREVAC GMBH

[DATE]

This certificate is being delivered by CureVac GmbH is a private, for-profit company having its business address at Paul-Ehrlich-Str. 15, 72076 Tübingen (the "Company"), pursuant to Section 9(b) of the Global Access Commitments Agreement between the Company and the Bill & Melinda Gates Foundation dated as of [] (the "Agreement"). Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to them in the Agreement.

The Company certifies as follows:

1. During the term of the Foundation Investment, the Company met the requirements of the Foundation Investment as set forth in the Agreement that were required to be complied with or performed by the Company during such time period.
2. Attached as Exhibit A to this certificate is a description of the Company's use of proceeds of the Foundation Investment during the term of the Foundation Investment.
3. Attached as Exhibit B to this certificate is the Company's evaluation of the Company's development of the Platform Technology and use of the Platform Technology to advance drug and vaccine candidates in support of the Foundation's Charitable Purpose, and progress with respect to the New Facility and Projects, including information regarding progress against the Global Access Commitments (as set forth in the Investment Documents) during the term of the Foundation Investment.

IN WITNESS WHEREOF, the undersigned has executed this certificate and has caused this certificate to be delivered on the date first above written.

CureVac GmbH

By: _____
Name:
Title:

**AMENDMENT NO. 2 TO THE
OPTION AGREEMENT**

[***]**

Confidential

REDACTED

Certain identified information, indicated by [***], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.**

EXECUTION COPY**SIDE AGREEMENT AND AMENDMENT NUMBER ONE**

to the

DEVELOPMENT AND OPTION AGREEMENT

THIS SIDE AGREEMENT AND AMENDMENT (“**Amendment Agreement**”) to the DEVELOPMENT AND OPTION AGREEMENT is entered into effective as of December 1, 2016 (the “**Amendment One Date**”), by and between ACUITAS THERAPEUTICS INC., with offices at 2714 West 31st Avenue, Vancouver, British Columbia, V6L 2A1, Canada (“**Acuitas**”), and CUREVAC AG, a company incorporated in Germany whose registered office is at Paul-Ehrlich-Straf3e 15, 72076 Tübingen, Germany (“**CureVac**”).

RECITALS

WHEREAS, Acuitas and CureVac entered into that certain Development and Option Agreement effective April 29th 2016 (the “**D&O Agreement**”) relating to the evaluation of and options to licence Acuitas LNP Technology for the research, development, manufacture and/or commercialisation of products incorporating Acuitas LNP Technology and CureVac Technology;

WHEREAS, both Acuitas and CureVac desire to include in the Work Plan the evaluation of Acuitas LNP Technology together with CureVac Technology relating to Gene Editing; and

WHEREAS, to enable the prompt commencement of such evaluation both Acuitas and CureVac desire to agree to certain side terms and conditions to, and to make certain amendments to the provisions of, the D&O Agreement so that a limited such evaluation may be commenced.

NOW, THEREFORE, in consideration of the mutual covenants and representations contained herein, and for other good and valuable consideration, the amount and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

AGREEMENT1. Definitions.

- 1.1. “**DNA Sequence**” means, for the purpose of this Amendment Agreement only, any sequence of DNA [*****] as such DNA Sequence(s) and Gene Target(s) are specified in Exhibit 3.1 or are subsequently reserved in accordance with Paragraph 2.3 hereof.
 - 1.2. “**Gene Target**” means, for the purpose of this Amendment Agreement only [*****] and/or pre-defined variants thereof, as such coding or non-coding sequence(s) and/or variant(s) are specified in Exhibit 3.1 or are subsequently reserved in accordance with Paragraph 2.3 hereof.
-

- 1.3. “**DNA Editing Protein**” means, for the purpose of this Amendment Agreement only, a Target encoded by an mRNA that upon delivery to a cell or micro-organism is intended to Gene Edit a human, animal, microorganism or virus coding or non-coding sequence within the genome of the human or animal cell, or microorganism or virus.
- 1.4. “**Gene Edit**” means, for the purpose of this Amendment Agreement only, to correct, modify, insert, delete, activate, inactivate or repair a coding or non-coding sequence within the genome of a human or animal cell, or microorganism or virus; and “**Gene Editing**” has the corresponding meaning.
- 1.5. “**Guide RNA**” means, for the purpose of this Amendment Agreement only, [*****]
- 1.6. The definition of “**Approved Partner**” in Section 1.11 of the D&O Agreement shall be replaced in its entirety by the following:

“1.11 “Approved Partner” means with respect to any Third Party to whom CureVac wishes to disclose Acuitas Confidential Information or transfer Acuitas LNP Technology or Materials provided by Acuitas to CureVac: (i) any Third Party licensee of CureVac Technology; (ii) any Third Party providing services set forth in the Work Plan to CureVac; or (iii) [*****].
- 1.7. All capitalised terms used in this Amendment Agreement and not otherwise defined in this Amendment Agreement have the meanings assigned them in the D&O Agreement.

2. **Target Reservation.**

- 2.1. On the Amendment One Date, the DNA Editing Protein [*****] on the Reserved Target List as a non-exclusive Target.
- 2.2. Until the conclusion of the Gene Editing Work Plan, CureVac hereby covenants to not submit any Target Notice for any other DNA Editing Protein.
- 2.3. In addition to the DNA Editing Protein Target, for the purpose of this Amendment Agreement only CureVac may non-exclusively reserve up to [*****] Gene Targets, and optionally up to [*****] DNA Sequences for each Gene Target, in each case at [*****]. The DNA Editing Protein Target counts as a single Reserved Target, however, [*****] available to CureVac under Article 4 of the D&O Agreement. CureVac will however be required to submit to the Escrow Agent for clearance and reservation all Gene Targets and DNA Sequences in accordance with Gene Target/DNA Sequence preclearance and reservation requirements analogous to those set forth for Targets in Sections 4.2 of the D&O Agreement.

3. **Program extension and Work-Plan for Gene Editing.**

- 3.1. The Parties hereby append Exhibit 3.1 (the “**Gene Editing Work Plan**”) as attached to this Amendment Agreement to the Work-Plan.
-

- 3.2. On the Amendment One Date, the Gene Editing Work Plan relates: (i) only to the use of [*****] as a DNA Editing Protein; and (ii) only to the Gene Targets and (iii) only to the DNA Sequences, such Gene Targets and DNA Sequences having been pre-cleared by the Escrow Agent by a mechanism analogous to that set forth in Section 4.2 of the D&O Agreement.
- 3.3. Acuitas hereby acknowledges that certain parts of the Gene Editing Work Plan include the evaluation of: (i) LNPs containing [*****] mRNA Constructs intended to express the DNA Editing Protein [*****] without containing [*****] Guide RNA(s), and/or without containing [*****] DNA Sequences; and (ii) separate LNPs containing [*****] Guide RNA(s), and/or containing [*****] DNA Sequences, in each case without containing said mRNA Construct(s), although the LNPs of (ii) are intended to be evaluated only in connection with those of (i).
- 3.4. Until the conclusion of the Gene Editing Work Plan, CureVac hereby covenants to neither: (i) submit any additional DNA Editing Proteins for pre-clearance by the Escrow Agent; nor (ii) change the scope of the Gene Editing Work Plan beyond that stated in (i) to (iii) of Paragraph 3.2 hereof, without obtaining the prior consent of Acuitas, such consent not to be unreasonably withheld or conditioned.
- 3.5. For the period during which [*****] is on the Reserved Target List, Acuitas hereby covenants not to provide any Third Party with any exclusive right, or option to obtain any exclusive right, under the Acuitas LNP Technology that would prevent CureVac from taking non-exclusive rights to any Gene Target or DNA Sequence which has been reserved in accordance with Section 2.3.
- 3.6. The second to last sentence of Section 3.4 of the D&O Agreement shall be replaced in its entirety by the following:

“CureVac shall use commercially reasonable efforts to obtain the foregoing assignment for Approved Partners, and if CureVac is unable to obtain such assignment, CureVac shall obtain: (x) [*****]; or (y) [*****], or seek to protect any such Know-How by any other form of intellectual property, without prior written permission from CureVac. CureVac shall not give such permission without the prior consent of Acuitas, such consent not to be unreasonably withheld or conditioned.”

4. **Licensed Product Option for Gene Editing.** Acuitas and CureVac shall discuss and negotiate in good faith, for the duration of the Gene Editing Work Plan, on the terms and conditions under which the D&O Agreement (and associated License Agreements) will be amended to encompass Licensed Products useful for Gene Editing for the purposes of Article 5 CureVac License Options; it being hereby agreed between the Parties that, with reference to the D&O Agreement (and associated License Agreements) on the Amendment One Date, the financial terms (including reservation costs, option exercise fees, milestones and royalties applied to any such Licensed Products useful for Gene Editing will be consistent with the corresponding financial terms already provided for in the D&O Agreement (and associated License Agreements) *provided*, that: (i) [*****] (ii) [*****] will be applied for Guide RNAs (with the applicability of such reservation costs for multiple Gene Targets to be discussed during such negotiations); and (iii) each DNA Editing Protein as a Target will count as a single Reserved Target, [*****] Reserved Targets available to CureVac under Article 4 of the D&O Agreement. For clarity, the terms “DNA Sequence” and “Gene Target” (and correspondingly, “Guide RNA”), as used in this Paragraph 4, will not be limited to those sequences specified in Exhibit 3. I hereof, but will be redefined by such amendment based on the definitions herein.
-

5. **Amendment of Section 3.5(c) of the D&O Agreement.**

5.1. Section 3.5(c) of the D&O Agreement is hereby amended to add the following at the end of such section:

“Acuitas shall not be required to maintain the licenses to In-Licensed Technology with respect to which CureVac shall not have exercised the option set forth in this subsection (c). Accordingly, Acuitas is free to enter into new licenses and modify or terminate existing licenses to any In-Licensed Technology until such time as it is licensed to CureVac; *provided*, that Acuitas has given CureVac at least [*****] days’ prior written notice of any modification or termination of any existing license to any In-Licensed Technology, such notice to specify the In-Licensed Technology to be modified or terminated. The parties acknowledge that any exercise of a sublicense to any In-Licensed Technology must be in accordance with the terms of Acuitas’ main Third Party license agreement.”

5.2. Acuitas represents and warrants that, on the Amendment One Date, it has no intent to immediately modify or terminate any existing license to any In-Licensed Technology to which CureVac has the option under Section 3.5(c) of the D&O Agreement.

6. **Miscellaneous.**

6.1. Except as expressly stated in this Amendment Agreement, the D&O Agreement remains unchanged and in full force and effect.

6.2. The provisions of ARTICLE IO of the D&O Agreement shall be applied by analogy to this Amendment Agreement.

IN WITNESS WHEREOF, the Parties have caused Amendment Agreement to be executed by their respective duly authorised officers as of the Amendment One Date.

CUREVAC AG

By:	<u>/s/ Dr. Florian von der Mülbe</u>	<u>/s/ Pierre Kemula</u>
Name:	<u>Dr. Florian von der Mülbe</u>	<u>Pierre Kemula</u>
Title:	<u>Chief Operating Officer</u>	<u>Chief Financial Officer</u>

CUREVAC AG

By:	<u>/s/ Thomas Madden</u>
Name:	<u>Thomas Madden</u>
Title:	<u>President and CEP</u>

Confidential

EXHIBIT 3.1: Gene Editing Work Plan

[*****]

REDACTED

Certain identified information, indicated by [*****], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Execution Version

CUREVAC (IDFF)

FINANCE FEE LETTER

From:

The European Investment Bank
100 blvd Konrad Adenauer
Luxembourg
L-2950 Luxembourg
(the “**Bank**”)

To:

CureVac Real Estate GmbH
Friedrich-Miescher-Str. 15
72076 Tübingen
Germany
(the “**Borrower**”)

Date: 27 June 2020

Subject: Finance Contract between The European Investment Bank and CureVac Real Estate GmbH dated 27 June 2020
Contract numbers (FI No) [***]; Serapis No: [*****]**

Dear Sirs,

We refer to the EUR 75,000,000 finance contract dated 27 June 2020 between the Bank as lender and the Borrower as borrower (the “**Finance Contract**”).

This letter (the “**Fee Letter**”) is the Finance Fee Letter as referred to in the Finance Contract.

1. Definitions

1.1 Terms defined in the Finance Contract shall have the same meaning when used in this Fee Letter, unless a contrary indication appears. This Fee Letter is a Finance Document.

1.2 In this Fee Letter:

“**Cancellation Fee**” means a fee of [*****]% ([*****] basis points) of the cancelled amount.

“**Drop Dead Fee**” has the meaning given to such term in Article 2.1 (*Drop Dead Fee*) below.

"**Prepayment Fee**" means, in relation to a Prepayment Amount in respect of a Tranche, a fee as follows:

- (a) a fee of [*****]% ([*****] basis points) of the Prepayment Amount if the Prepayment Date is after the relevant Disbursement Date but before or on the [*****] of such Disbursement Date;
- (b) a fee of [*****]% ([*****] basis points) of the Prepayment Amount if the Prepayment Date is after the [*****] of the relevant Disbursement Date but before or on the [*****] of such Disbursement Date;
- (c) a fee of [*****]% ([*****] basis points) of the Prepayment Amount if the Prepayment Date is after the [*****] of the relevant Disbursement Date but before or on the [*****] of such Disbursement Date;
- (d) a fee of [*****]% ([*****] basis points) of the Prepayment Amount if the Prepayment Date is after the [*****] of the relevant Disbursement Date but before or on the [*****] of such Disbursement Date;
- (e) a fee of [*****]% ([*****] basis points) of the Prepayment Amount if the Prepayment Date is after the [*****] of the relevant Disbursement Date but before or on the [*****] of such Disbursement; or
- (f) a fee of [*****]% ([*****] basis points) of the Prepayment Amount if the Prepayment Date is after the [*****] of the relevant Disbursement Date but before the Maturity Date,

with such fee being payable on the applicable Prepayment Date.

"**Prepayment Amount**" means the amount of a Tranche to be prepaid by the Borrower in accordance with any voluntary prepayment or compulsory prepayment.

2. Drop Dead Fee

- 2.1 If no disbursement is made within [*****] months from the date of the Finance Contract or in case the Credit is cancelled in full under Article 2.6 (*Cancellation*) of the Finance Contract prior to the expiry of this term, the Borrower shall pay to the Bank a one-off contractual fee equal to [*****]% ([*****] basis points) of the Credit (the "**Drop Dead Fee**").
- 2.2 The Drop Dead Fee shall be payable by the Borrower to the Bank within [*****] days of the Borrower's receipt of the Bank's demand or within any longer period specified in the Bank's demand.
- 2.3 For the avoidance of doubt, the Drop Dead Fee payable under this Article 2 (*Drop Dead Fee*) is independent of any other fees stipulated in this Fee Letter or the Finance Contract.

3. Cancellation Fee

- 3.1 If the Borrower pursuant to Sub-Paragraph (a) of Article 2.6 (*Cancellation*) of the Finance Contract cancels an Accepted Tranche, the Borrower shall pay to the Bank the Cancellation Fee.
- 3.2 If the Bank pursuant to Sub-Paragraph (b) of Article 2.6 (*Cancellation*) of the Finance Contract cancels all or part of an Accepted Tranche, the Borrower shall pay to the Bank the Cancellation Fee.
- 3.3 If an Accepted Tranche is not disbursed on the Disbursement Date because the conditions precedent set out in Article 2.5.3 (*All Tranches – Other Conditions*) of the Finance Contract are not satisfied on such date, such Tranche shall be cancelled and the Borrower shall pay to the Bank the relevant Cancellation Fee.

4. PREPAYMENT FEE

If:

- (a) the Borrower prepays a Tranche in accordance with Article 5.2 (*Voluntary prepayment*) of the Finance Contract; or
- (b) a Prepayment Event in relation to a Tranche (other than in relation to a prepayment pursuant to Article 5.3.3 (*Illegality*) of the Finance Contract) occurs in accordance with Article 5.3 (*Compulsory prepayment*) of the Finance Contract;

the Borrower shall pay to the Bank the Prepayment Fee.

5. MISCELLANEOUS

5.1 The provisions of Article 2.10 (*Sums due under Article 2*) and Article 8.1 (*Taxes, duties and fees*) of the Finance Contract shall apply to all payments made or to be made under this Fee Letter.

5.2 If the date on which a fee under this Fee Letter is due to be paid is not a Relevant Business

Day, payment shall be made on the next Relevant Business Day.

6. COUNTERPARTS

This Fee Letter may be executed in any number of counterparts, and this has the same effect as if the signatures on the counterparts were on a single copy of this Fee Letter.

7. GOVERNING LAW

This Fee Letter and any non-contractual obligations arising out of or in connection with it are governed by Luxembourg law. The parties to this Fee Letter submit to the exclusive jurisdiction of the Luxembourg courts.

If you agree to the above, please sign and return to the Bank the enclosed copy of this Fee Letter.

Yours faithfully

/s/ Tero Pietila

Name: Tero Pietila

Title: Head of Division

For and on behalf of
European Investment Bank

/s/ Ayse Nil ADA

Name: Ayse Nil ADA

Title: Legal Counsel

We acknowledge and agree to the above:

/s/ Florian von der Mülbe

/s/ Rein hard Rapp

Name: Florian von der Mülbe

Name: Rein hard Rapp

Title: Managing Director

Title: Managing Director

For and on behalf of
CureVac Real Estate GmbH

REDACTED

Certain identified information, indicated by [***], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.**

Execution Version

Contract number (FI No): [*****]

Serapis No: [*****]

CUREVAC (IDFF)

Finance Contract

between the

European Investment Bank

and

CureVac Real Estate GmbH

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THIS CONTRACT IS MADE ON 27 JUNE 2020 BETWEEN:

The European Investment Bank having its seat at 100 blvd Konrad Adenauer, Luxembourg, L-2950 Luxembourg, represented by Tero PIETILA, Head of Division and Ayse Nil ADA, Legal Counsel

(the “**Bank**”)

and

Curevac Real Estate GmbH a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated in Germany, having its office at Friedrich-Miescher-Str. 15, 72076 Tübingen, Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Stuttgart under HRB 757523, represented by Dr. Florian von der Mülbe and Dr. Reinhard Rapp

(the “**Borrower**”)

WHEREAS:

- (A) The Borrower has stated that it is undertaking together with CureVac AG a research and development project relating to infectious disease vaccines, including a SARS-CoV-2 Vaccine, and is furnishing and validating a good manufacturing practice compliant messenger ribonucleic acid (RNA) production facility (the “**GMP IV**”), both in Germany as more particularly described in the technical description (the “**Technical Description**”) set out in Schedule A (*Investment Specification and Reporting*) (the “**Investment**”). The total cost of the Investment, as estimated by the Bank, is EUR [*****] ([*****] euro).
- (B) The Bank, considering that the financing of the Investment falls within the scope of its functions, agreed to provide the Borrower with a credit in an amount of EUR 75,000,000 (seventy five million euro) under this finance contract (the “**Contract**”) to partially finance the Investment; **provided that** the amount of the loan hereunder shall not, in any case, exceed 50% (fifty per cent.) of the cost of the Investment. The parties to this Contract being aware of the differences between a participation credit (*partiarisches Darlehen*) and a silent partnership (*stille Gesellschaft*), that the Bank will not participate in any loss of the Borrower and that this Contract provides for a participation credit (*partiarisches Darlehen*), have consciously decided to enter into this Contract.
- (C) The Credit falls under a joint initiative between the Bank and the European Commission, which is intended as a new Bank financing instrument, to finance *inter alia* research projects and research infrastructure under the Horizon 2020 framework programme of the European Union for Research and Technological Development (2014-2020) (the “**Horizon 2020 Framework EU Programme**”).
- (D) The statute of the Bank provides that the Bank shall ensure that its funds are used as rationally as possible in the interests of the European Union; and, accordingly, the terms and conditions of the Bank’s loan operations must be consistent with relevant policies of the European Union.
- (E) The financing of the Investment includes certain state subsidies or grants and the provision of such funds has been duly authorised and will be provided in compliance with all relevant legislation of the European Union.
- (F) The Bank considers that access to information plays an essential role in the reduction of environmental and social risks, including human rights violations, linked to the projects it finances and has therefore established its transparency policy, the purpose of which is to enhance the accountability of the Bank’s group towards its stakeholders and the citizens of the European Union in general.
- (G) The processing of personal data shall be carried out by the Bank in accordance with applicable European Union legislation on the protection of individuals with regard to the processing of personal data by the European Union institutions and bodies and on the free movement of such data.
- (H) The Bank supports the implementation of international and EU standards in the field of anti-money laundering and countering the financing of terrorism and promotes tax good governance standards. It has established policies and procedures to avoid the risk of misuse of its funds for purposes which are illegal or abusive in relation to applicable laws. The Bank’s group statement on tax fraud, tax evasion, tax avoidance, aggressive tax planning, money laundering and financing of terrorism is available on the Bank’s website and offers further guidance to the Bank’s contracting counterparties.

It is hereby agreed as follows:

ARTICLE 1

Interpretation and definitions

1.1 Interpretation

In this Contract:

- (a) references to Articles, Recitals, Schedules and (Sub-)Paragraphs are, save if explicitly stipulated otherwise, references respectively to articles of, and recitals, schedules and (sub-)paragraphs of schedules to, this Contract. All Recitals and Schedules form part of this Contract;
- (b) references to “law” or “laws” mean (i) any applicable law and any applicable treaty, constitution, statute, legislation, decree, normative act, rule, regulation, judgement, order, writ, injunction, determination, award or other legislative or administrative measure or judicial or arbitral decision in any jurisdiction which is binding or applicable case law, and (ii) EU Law;
- (c) references to applicable law, applicable laws or applicable jurisdiction means (i) a law or jurisdiction applicable to the Borrower or any other Obligor (as the context requires), its respective rights and/or obligations (in each case arising out of or in connection with the Finance Documents), its capacity and/or assets and/or the Investment; and/or, as applicable, (ii) a law or jurisdiction (including in each case the Bank’s Statute) applicable to the Bank, its rights, obligations, capacity and/or assets;
- (d) references to a provision of law are references to that provision as amended or re-enacted;
- (e) references to any Finance Document or other agreement or instrument are references to that Finance Document or other agreement or instrument as amended, novated, supplemented, extended or restated;
- (f) words and expressions in plural shall include singular and *vice versa*;
- (g) “promptly” is to be construed as *unverzüglich* (without undue delay) within the meaning of Section 121 para. 1 sentence 1 of the BGB;
- (h) a Default (other than an Event of Default) is “continuing” if it has not been remedied or waived and an Event of Default is “continuing” if it has not been waived; and
- (i) terms defined in the GDPR (as defined below), including the terms, “data subject”, “personal data” and “processing” have the same meanings when used in Paragraph 26 (*Data Protection*) of Schedule G (*General Undertakings*) of this Contract.

This Contract is made in the English language. For the avoidance of doubt, the English language version of this Contract shall prevail over any translation of this Contract. However, where a German translation of a word or phrase appears in the text of this Contract, the German translation of such word or phrase shall prevail.

1.2 Definitions

In this Contract:

“**Accepted Tranche**” means a Tranche in respect of a Disbursement Offer which has been duly accepted by the Borrower in accordance with its terms on or before the Disbursement Acceptance Deadline.

“**acting in concert**” means acting together pursuant to an agreement or understanding (whether formal or informal).

“**AktG**” means the German stock corporation act (*Aktiengesetz*).

“**Auditor**” means an independent, international and leading firm of accounts (which has at least offices in Luxembourg and Frankfurt am Main) appointed by the Bank and accepted by the Borrower. If the Bank and the Borrower have not agreed on an Auditor within 60 (sixty) days of any such request, the Bank will have sole discretion to appoint an Auditor.

“**Authorisation**” means an authorisation, permit, consent, approval, resolution, licence, exemption, filing, notarisation or registration.

“**Authorised Signatory**” means a person authorised to sign individually or jointly (as the case may be) Disbursement Acceptances on behalf of the Borrower and named in the most recent List of Authorised Signatories and Accounts received by the Bank prior to the receipt of the relevant Disbursement Acceptance.

“**Batch**” means a pre-defined quantity of units of a medicinal product all of the same pharmaceutical form, manufactured at GMP IV and having undergone a single series of manufacturing operations to yield the final desired formulated medicinal product. It is estimated that the production capacity GMP IV will be 80 Batches per annum.

“**Buy-Back Amount**” has the meaning given to it in Paragraph (g) of Article 4.2 (*Variable Remuneration*).

“**BGB**” means the German Civil Code (*Bürgerliches Gesetzbuch*).

“**Building Leasing Agreements**” means (i) the lease agreement (*Mietvertrag*) between the Borrower as lessee (*Mieter*) and Technologieförderung Reutlingen-Tübingen GmbH as lessor (*Vermieterin*) with effect from 1 January 2011 and (ii) lease agreement (*Mietvertrag*) between the Borrower as lessee (*Mieter*) and Fränkel Immobilien-Service GmbH as lessor (*Vermieter*) originally dated 8 June 2018, in each case as amended from time to time.

“**Business Day**” means a day (other than a Saturday or Sunday) on which the Bank and commercial banks are open for general business in Luxembourg.

“**Cancellation Fee**” has the meaning given to such term in Article 1.2 (*Definitions*) of the Finance Fee Letter.

“**Change in the Beneficial Ownership**” means a change in the ultimate ownership or control of the Borrower according to the definition of “beneficial owner” set out in article 3(6) of Directive 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, as amended, supplemented or restated.

“**Change-of-Control Event**” means:

- (a) any person or group of persons acting in concert gains Control of the Borrower, CureVac AG or of any entity directly or indirectly Controlling the Borrower; or
- (b) CureVac AG ceases:
 - (i) to be the beneficial owner directly or indirectly through wholly owned subsidiaries of at least 75.1% (seventy five point one per cent) of the issued share capital of the Borrower;
 - (ii) the power to cast, or to control the casting of, at least 75.1% (seventy five point one per cent) of the total number of votes held by all shareholders of the Borrower;
 - (iii) the power to appoint or remove all, or the majority, of the directors of the Borrower; and/or
 - (iv) the power to direct the management and policies of the Borrower, whether through the ownership of voting capital, by contract.

“**Change-of-Law Event**” means the enactment, promulgation, execution or ratification of or any change in or amendment to any law, rule or regulation (or in the application or official interpretation of any law, rule or regulation) that occurs after the date of this Contract and which, in the opinion of the Bank, would materially impair an Obligor’s ability to perform its obligations under the Finance Documents.

“**Co-Funding**” means any funding by a Group Company to finance the activities of the Borrower in relation to infectious diseases, which must be made by way of equity or by loans which are subordinated to any claims of the Bank, satisfactory to the Bank.

“**Compliance Certificate**” means a certificate substantially in the form set out in Schedule E (*Form of Compliance Certificate*).

“**Contract Number**” shall mean each Bank generated number identifying this Contract and indicated on the cover page of this Contract after the letters “FI N°”.

“**Control**” means:

- (a) owning (directly or indirectly) more than 50% (fifty per cent) of the shares in an entity;
- (b) the power to cast, or to control the casting of, more than 50% (fifty per cent) of the total number of votes held by all shareholders of an entity;
- (c) the power to appoint or remove all, or the majority, of the directors of an entity; and/or
- (d) the power to direct the management and policies of an entity, whether through the ownership of voting capital, by contract or otherwise,

and “**Controlling**” and “**Controlled**” has the corresponding meaning.

“**COVID-19 Syndrome**” means the disease resulting from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

“**Credit**” has the meaning given to it in Article 2.1 (*Amount of Credit*).

“**Criminal Offence**” means any of the following criminal offences as applicable: tax crimes (as referred to in the directive (EU) 2015/849 of 20 May 2015), fraud, corruption, coercion, collusion, obstruction, money laundering, financing of terrorism or any illegal activity that may affect the financial interests of the EU, according to applicable laws.

“**CureVac AG**” means CureVac AG, a stock corporation (*Aktiengesellschaft*) incorporated in Germany, having its office at Friedrich-Miescher-Str. 15, 72076 Tübingen, Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Stuttgart under HRB 754041.

“**CureVac IPO**” means the admission to trading of any part of the share capital of CureVac AG or the respective entity into which CureVac AG is merged or otherwise transferred or to which CureVac AG is converted, on any recognised stock or investment exchange or any sale or issue of share capital of CureVac AG by way of initial public offering.

“**Default**” means an Event of Default or any event or circumstance specified in Article 9 (*Events of Default*) which would (with the expiry of a grace period, the giving of notice, the making of any determination under this Contract or any combination of any of the foregoing) be an Event of Default.

“**Deferred Interest Fixed Rate**” means a fixed rate of 0.5% (fifty basis points) per annum for Tranche A, Tranche B and Tranche C.

“**DH Investment**” means (i) the investment of Mr. Dietmar Hopp in connection with the CureVac IPO by purchasing newly issued shares in this CureVac IPO in an amount of EUR 100,000,000.00 (or more) or (ii) another equity investment of Mr. Dietmar Hopp in an amount of EUR 100,000,000.00 (or more) into CureVac AG or the respective entity into which CureVac AG is merged or otherwise transferred or to which CureVac AG is converted.

“**DH Convertible Loan Agreement**” means the EUR 50,000,000 and USD 70,000,000 convertible loan between Mr. Dietmar Hopp and CureVac AG dated 3 May 2019 with a disbursed amount of approx. EUR 70,300,000 as at the date of this Finance Contract.

“**Disbursement Acceptance**” means a copy of the Disbursement Offer duly countersigned by the Borrower.

“**Disbursement Acceptance Deadline**” means the date and time of expiry of a Disbursement Offer as specified therein.

“**Disbursement Account**” means, in respect of each Tranche, the bank account set out in the most recent List of Authorised Signatories and Accounts.

“**Disbursement Date**” means the date on which disbursement of a Tranche is made by the Bank.

“**Disbursement Offer**” means a letter substantially in the form set out in Schedule C (*Form of Disbursement Offer/Acceptance*).

“**Dispute**” has the meaning given to it in Article 10.2 (*Jurisdiction*).

“**Disruption Event**” means either or both of:

- (a) a material disruption to those payment or communications systems or to those financial markets which are, in each case, required to operate in order for payments to be made in connection with this Contract; or
- (b) the occurrence of any other event which results in a disruption (of a technical or systems-related nature) to the treasury or payments operations of either the Bank or the Borrower, preventing that party from:
 - (i) performing its payment obligations under this Contract; or
 - (ii) communicating with other parties in accordance with the terms of this Contract,

and which disruption (in either such case as per Paragraph (a) or (b) above) is not caused by, and is beyond the control of, the party whose operations are disrupted.

“**Drop Dead Fee**” has the meaning given to such term in Article 2.1 (*Drop Dead Fee*) of the Finance Fee Letter.

“**EBITDA**” means, in respect of any Relevant Period, the consolidated operating profit of the Group before taxation (excluding the results from discontinued operations):

- (a) before deducting any interest, commission, fees, discounts, prepayment fees, premiums or charges and other finance payments whether paid, payable or capitalised by any Group Company (calculated on a consolidated basis) in respect of that Relevant Period;
- (b) not including any accrued interest owing to any Group Company;
- (c) after adding back any amount attributable to the amortisation or depreciation of assets of members of the Group;
- (d) before taking into account any Exceptional Items;
- (e) after deducting the amount of any profit (or adding back the amount of any loss) of any Group Company which is attributable to minority interests;
- (f) plus or minus the Group’s share of the profits or losses (after finance costs and tax) of entities which are not Group Companies;
- (g) before taking into account any unrealised gains or losses on any financial instrument (other than any derivative instrument which is accounted for on a hedge accounting basis); and
- (h) before taking into account any gain arising from an upward revaluation of any other asset,

in each case, to the extent added, deducted or taken into account, as the case may be, for the purposes of determining operating profits of the Group before taxation.

“**Environment**” means the following, insofar as they affect human health or social well-being:

- (a) fauna and flora;
- (b) soil, water, air, climate and the landscape; and
- (c) cultural heritage and the built environment,

and includes, without limitation, occupational and community health and safety.

“**Environmental Approval**” means any Authorisation required by Environmental Law.

“**Environmental Claim**” means any claim, proceeding, formal notice or investigation by any person in respect of any Environmental Law.

“**Environmental Law**” means EU Law including principles and standards, and national laws and regulations, of which a principal objective is the preservation, protection or improvement of the Environment.

“**EU Directives**” means the directives of the European Union.

“**EU Law**” means the *acquis communautaire* of the European Union as expressed through the Treaties of the European Union, the regulations, the EU Directives, delegated acts, implementing acts, and the case law of the Court of Justice of the European Union.

“**EUR**” or “**euro**” means the lawful currency of the Member States of the European Union which adopt or have adopted it as their currency in accordance with the relevant provisions of the Treaty on European Union and the Treaty on the Functioning of the European Union or their succeeding treaties.

“**EURIBOR**” has the meaning given to it in Schedule B (*Definition of EURIBOR*).

“**Event of Default**” means any of the circumstances, events or occurrences specified in Article 9 (*Events of Default*).

“**Exceptional Items**” means any material items of an unusual or non-recurring nature which represent gains or losses including those arising on:

- (a) the restructuring of the activities of an entity and reversals of any provisions for the cost of restructuring;
- (b) disposals, revaluations, write downs or impairment of non-current assets or any reversal of any write down or impairment;
- (c) disposals of assets associated with discontinued operations; and
- (d) any other examples of “exceptional items” (as such term has the meaning attributed to it in IFRS).

“**Existing Indebtedness**” means any Indebtedness of members of the Group arising under any arrangement listed in Schedule J (*Existing Indebtedness*).

“**Existing Security**” means any Security granted by members of the Group which is listed in Schedule K (*Existing Security*).

“**Expert Determination**” has the meaning given to it in Article 4.2(c)(i) (*Variable Remuneration*).

“**Fee Letters**” means the Finance Fee Letter and the Initial Fee Letter and “Fee Letter” means each of them.

“**Final Availability Date**” means:

- (a) for Tranche A, the day falling [*****] months after the date of this Contract;
- (b) for Tranche B, the day falling [*****] months after the date of this Contract; and
- (c) for Tranche C, the day falling [*****] months after the date of this Contract.

“**Finance Documents**” means this Contract, any Guarantee Agreement, the Security Documents, the Fee Letters and any other document designated as a “Finance Document” by the Borrower and the Bank.

“**Finance Fee Letter**” means the Luxembourg law governed fee letter from the Bank to the Borrower dated on or about the date hereof.

“**Finance Lease**” means any lease or hire purchase contract which would, in accordance with IFRS in force as at the date of this Contract, be treated as a finance or capital lease.

“**GAAP**” means generally accepted accounting principles in (*Grundsätze ordnungsgemäßer Buchführung*) in Germany, including IFRS.

“**GDPR**” means General Data Protection Regulation (EU) 2016/679.

“**Germany**” means the Federal Republic of Germany.

“**GMP IV**” has the meaning given to that term in Recital (A).

“**Group**” means the Group Companies, taken together as a whole.

“**Group Companies**” means CureVac AG, the Borrower, CureVac, US (250 Summer St 3rd Fl Boston, MA 02210, USA) and their Subsidiaries.

“**Guarantee Agreement**” means a guarantee and indemnity agreement in form and substance satisfactory to the Bank to be entered into by any of the Guarantors as guarantor and the Bank as beneficiary.

“**Guarantors**” means CureVac AG and each Material Subsidiary which enters into a Guarantee Agreement in accordance with Sub-Paragraph (b) of Paragraph 17 (*Guarantees*) of Schedule H (*General Undertakings*).

“**Horizon 2020 Framework EU Programme**” has the meaning given in Recital (C).

“**Horizon 2020 Legal Basis**” means the Regulation 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 and Council Decision of 3 December 2013 establishing the specific programme implementing Horizon 2020.

“**IFRS**” means international accounting standards within the meaning of IAS Regulation 1606/2002 to the extent applicable to the relevant financial statements.

“**Indebtedness**” means any:

- (a) obligations for borrowed money;
- (b) indebtedness under any acceptance credit;
- (c) indebtedness under any bond, debenture, note or similar instrument;
- (d) instrument under any bill of exchange;
- (e) indebtedness in respect of any interest rate or currency swap or forward currency sale or purchase or other form of interest or currency hedging transaction (including without limit caps, collars and floors);
- (f) indebtedness under any Finance Lease;
- (g) indebtedness (actual or contingent) under any guarantee, bond security, indemnity or other agreement;
- (h) indebtedness (actual or contingent) under any instrument entered into for the purpose of raising finance;
- (i) indebtedness in respect of a liability to reimburse a purchaser of any receivables sold or discounted in the event that any amount of those receivables is not paid;
- (j) indebtedness arising under a securitisation; or
- (k) other transaction which has the commercial effect of borrowing.

“**Initial Fee Letter**” means the Luxembourg law governed fee letter from the Bank to the Borrower dated 18 March 2020.

“**InsO**” means the German Insolvency Code (*Insolvenzordnung*).

“**Intellectual Property Rights**” means intellectual property rights (*gewerbliche Schutzrechte; Immaterialgüterrechte*) of every designation (including, without limitation, patents, utility patents, copyrights, design rights, trademarks, software, service marks and know how) whether capable of registration or not.

“**Investment**” has the meaning given to that term in Recital (A).

“**Land Charge**” means the first ranking land charge without certificate (*Buchgrundschuld*) in the amount of EUR 75,000,000 (plus 16% interest p.a. and 10% one-time supplementary payment) created under the Land Charge Creation Deed by which the Borrower will encumber its Property and certain of its assets falling within the statutory scope of the Land Charge (*Grundschuldhaftungsverband*) in favour of the Bank.

“**Land Charge Creation Deed**” means any document by means of which the Land Charge is created and which includes, *inter alia*, an abstract acknowledgement of debt of the Borrower in the amount of the Land Charge (in each case subject to the submission to the immediate enforcement (*sofortige Zwangsvollstreckungsunterwerfung*) *in personam* and *in rem* for the full Land Charge amount), the Borrower’s approval for registration (*Eintragungsbewilligung*) of the Land Charge in the land register, regardless of whether such document will be officially certified (*öffentlich beglaubigt*) or notarially recorded (*notariell beurkundet*).

“**Lead Organisation**” means the European Union, the United Nations and international standard setting organisations including the International Monetary Fund, the Financial Stability Board, the Financial Action Task Force, the Organisation for Economic Cooperation and Development and the Global Forum on Transparency and Exchange of Information for Tax Purposes and any successor organisations.

“**List of Authorised Signatories and Accounts**” means a list (signed by Authorised Signatories), in form and substance satisfactory to the Bank, setting out: (i) the Authorised Signatories, accompanied by evidence of signing authority of the persons named on the list and specifying if they have individual or joint signing authority, (ii) the specimen signatures of such persons, and (iii) the bank account(s) to which disbursements may be made under this Contract (specified by IBAN code if the country is included in the IBAN Registry published by SWIFT, or in the appropriate account format in line with the local banking practice), BIC/SWIFT code of the bank and the name of the bank account(s) beneficiary.

“**Loan**” means the aggregate of the amounts disbursed from time to time by the Bank under this Contract.

“**Loan Outstanding**” means the aggregate of the amounts disbursed from time to time by the Bank under this Contract that remains outstanding.

“**Material Adverse Change**” means, any event or change of condition, which, in the reasonable opinion of the Bank has a material adverse effect on:

- (a) the ability of any Obligor to perform its respective obligations under the Finance Documents;
- (b) the business, operations, property or condition (financial or otherwise) of any Obligor or the Group as a whole; or
- (c) the legality, validity or enforceability of, or the effectiveness or ranking or value of, any Security granted to the Bank, or the rights or remedies of the Bank under the Finance Documents.

“**Material Subsidiary**” means any Subsidiary of CureVac AG or the Borrower from time to time, whose gross revenues, Total Assets or EBITDA represents not less than 10% of (i) the consolidated gross revenues of the Group or, (ii) the Total Assets, or, (iii) as the case may be, the consolidated EBITDA of the Group, as calculated based on the then latest consolidated audited accounts of the Group.

“**Maturity Date**” means, for each Tranche, the sole Repayment Date of that Tranche as specified in the relevant Disbursement Offer, being the date falling seven (7) years from the respective Disbursement Date of the relevant Tranche. In case such date is not a Relevant Business Day, it means the preceding Relevant Business Day, with adjustment to the interest due under Article 4 (*Interest*).

“**Non-EIB Financing**” includes any loan (save for the Loan and any other direct loans from the Bank to the Borrower (or any other Group Company)), credit bond or other form of financial indebtedness or any obligation for the payment or repayment of money originally granted to the Borrower (or any other Group Company)) from an entity or person that is not a member of the Group for a term of more than 3 (three) years.

“**Obligor**” means the Borrower and each Guarantor.

“**Permitted Disposal**” means each disposal permitted in accordance with Sub-Paragraph (b) of Paragraph 7 (*Disposal of assets*) of Schedule H (*General Undertakings*).

“**Permitted Guarantees**” means each and every guarantee permitted in accordance with Paragraph 17 (*Guarantees*) of Schedule H (*General Undertakings*).

“**Permitted Hedging**” has the meaning given to such term in Paragraph 18 (*Hedging*) of Schedule H (*General Undertakings*).

“**Permitted Indebtedness**” means the Existing Indebtedness (if any) and the Indebtedness of the Borrower and/or any Group Company which is permitted in accordance with Paragraph 16 (*Indebtedness*) of Schedule H (*General Undertakings*).

“**Permitted Security**” means the Existing Security (if any) and the Security of the Borrower and/or any Group Company which is permitted in accordance with Sub-Paragraph (c) of Paragraph 24 (*Negative pledge*) of Schedule H (*General Undertakings*).

“**Prepayment Amount**” means the amount of a Tranche to be prepaid by the Borrower in accordance with Articles 5.2 (*Voluntary prepayment*), 5.3 (*Compulsory prepayment*) or 9.1 (*Right to demand repayment*).

“**Prepayment Date**” means the date on which the Borrower proposes or is requested by the Bank, as applicable, to effect prepayment of a Prepayment Amount (for the avoidance of doubt, including a prepayment resulting from a cancellation of a Tranche).

“**Prepayment Event**” means any of the events described in Article 5.3 (*Compulsory Prepayment*).

“**Prepayment Fee**” has the meaning given to such term in the Finance Fee Letter.

“**Prepayment Notice**” means a written notice from the Bank to the Borrower in accordance with Article 5.2.3 (*Prepayment mechanics*).

“**Prepayment Request**” means a written request from the Borrower to the Bank to prepay all or part of the Loan Outstanding, in accordance with Article 5.2.1 (*Prepayment option*).

“**Property**” means the property of the Borrower at Waldhäuser Str., 72076 Tübingen, , Germany, registered with the land register (*Grundbuch*) of Tübingen, Germany, local court (*Amtsgericht*) of Böblingen, Germany, folio 99853.

“**Qualified Person**” means a qualified person as referred to in Article 48 of Directive 2001/83/EC for medicinal products for human use, as may be amended from time to time.

“**Released Batch**” means a Batch or Batches of a medicinal product that have been certified by a Qualified Person that the Batch is in compliance with the specification and satisfies the applicable legislation and all provisions and requirements for human use stipulated within authorisations approved by the competent authorities.

“**Relevant Business Day**” means a day on which the Trans-European Automated Real-time Gross Settlement Express Transfer payment system which utilises a single shared platform and which was launched on 19 November 2007 (TARGET2) is open for the settlement of payments in EUR.

“**Relevant Period**” means each period of 12 (twelve) months ending on or about the last day of the financial year.

“**Remuneration Cap**” means, at any time, an amount of EUR 75,000,000 (seventy five million euro) or any other amount agreed between the Bank and the Borrower in writing.

“**Remuneration Payments**” has the meaning given to that term in Paragraph (a) of Article 4.2 (*Variable Remuneration*).

“**Remuneration Payment Date**” means the first 31 March within the Remuneration Period and, afterwards, any 31 March within the Remuneration Period following the first 31 March within the Remuneration Period.

“**Remuneration Period**” means a period commencing on the earlier of:

- (a) the first financial year in which CureVac AG has a positive EBITDA; and
- (b) the year 2025 (i.e. payment in 2025, function of the actual number of Batches produced in 2024),

and terminating on the date falling 12 (twelve) years later.

“**Repayment Date**” shall mean the sole payment date specified in the Disbursement Offer for the repayment of a Tranche in accordance with Article 5.1 (*Normal repayment*).

“**Repeating Representations**” means each of the representations set out in Schedule G (*Representations and Warranties*) other than the representations set out in the Paragraphs thereof which are identified with the words “(*Non-repeating*)” at the end of the Paragraphs.

“**SARS-CoV-2 Vaccine**” means a vaccine against SARS-CoV-2, the virus that causes COVID-19 Syndrome developed by a Group Company.

“**Security**” means any mortgage, land charge (*Grundschuld*), security purpose agreement (*Sicherungszweckvereinbarung*), pledge, lien, charge, assignment, security transfer (*Sicherungsübereignung*), retention of title arrangements, hypothecation, or other security interest securing any obligation of any person or any other agreement or arrangement having a similar effect.

“**Security Purpose Agreement**” means the security purpose agreement (*Sicherungszweckvereinbarung*) to be entered into by the Borrower as security grantor and the Bank as beneficiary in relation to the Land Charge.

“**Security Documents**” means each Guarantee Agreement, the Land Charge Creation Deed, the Security Purpose Agreement and any other document entered into by any person creating or expressed to create any Security over all or any part of its assets in respect of the obligations of any of the Obligor under any of the Finance Documents.

“**Senior Management Change**” means that any Senior Management Personnel has ceased to be actively involved in the management of the Borrower without the Bank having given its prior written consent to such a change.

“**Senior Management Personnel**” means each of Ingmar Hoerr, Franz-Werner Haas, Florian von der Mülbe, Mariola Fotin-Mleczek and Pierre Kemula.

“**Subsidiary**” means a subsidiary (*abhängiges Unternehmen*) of which the Borrower (*herrschendes Unternehmen*) has direct or indirect control within the meaning of Section 17 AktG.

“**Tax**” means any tax, levy, impost, duty or other charge or withholding of a similar nature (including any penalty or interest payable in connection with any failure to pay or any delay in paying any of the same).

“**Technical Description**” has the meaning given to it in Recital (A).

“**Total Assets**” means the total consolidated assets of the Group, as shown in CureVac AG’s latest consolidated financial statements, as at the end of any Relevant Period.

“**Tranche**” means each disbursement made or to be made under this Contract consisting of Tranche A, Tranche B and Tranche C. In the event that no Disbursement Acceptance has been received, Tranche shall mean a Tranche as offered under Article 2.2.2 (*Disbursement Offer*).

“**Tranche A**” means the first Tranche in the amount set out in Paragraph (a) of Article 2.2.1 (*Tranches*), in relation to which certain variable payments are granted to the Bank in accordance with Article 4.2 (*Variable Remuneration*) and a Deferred Interest Fixed Rate shall be paid in accordance with Article 4.1 (*Deferred Interest Fixed Rate*).

“**Tranche B**” means the second Tranche in the amount set out in Paragraph (b) of Article 2.2.1 (*Tranches*), in relation to which certain variable payments are granted to the Bank in accordance with Article 4.2 (*Variable Remuneration*) and a Deferred Interest Fixed Rate shall be paid in accordance with Article 4.1 (*Deferred Interest Fixed Rate*).

“**Tranche C**” means the third Tranche in the amount set out in Paragraph (c) of Article 2.2.1 (*Tranches*), in relation to which certain variable payments are granted to the Bank in accordance with Article 4.2 (*Variable Remuneration*) and a Deferred Interest Fixed Rate shall be paid in accordance with Article 4.1 (*Deferred Interest Fixed Rate*).

“**Voluntary Non EIB Prepayment**” means a voluntary prepayment by any Group Company, including any Guarantor, (for the avoidance of doubt, prepayment shall include a repurchase, redemption or cancellation where applicable) of a part or the whole of any Non-EIB Financing where:

- (a) such prepayment is not made within a revolving credit facility (save for the cancellation of a revolving credit facility); or
- (b) such prepayment is not made out of the proceeds of a loan or other indebtedness having a term at least equal to the unexpired term of the Non-EIB Financing prepaid; or
- (c) such prepayment is not made under the DH Convertible Loan Agreement.

ARTICLE 2

Credit and Disbursements

2.1 Amount of Credit

By this Contract, the Bank establishes in favour of the Borrower, and the Borrower accepts, a credit in an amount of EUR 75,000,000 (seventy five million euro) for the financing of the Investment (the “**Credit**”).

2.2 Disbursement procedure

2.2.1 Tranches

The Bank shall disburse the Credit in Euros in three (3) Tranches, as set out below:

- (a) Tranche A, in an amount of at least EUR 15,000,000 (fifteen million euro) and up to EUR 25,000,000 (twenty five million euro);
- (b) Tranche B, in an amount of at least EUR 15,000,000 (fifteen million euro) and up to EUR 25,000,000 (twenty five million euro); and
- (c) Tranche C, in an amount of at least EUR 15,000,000 (fifteen million euro) and up to the undrawn balance of the Credit.

2.2.2 Disbursement Offer

Upon request by the Borrower and subject to Article 2.5 (*Conditions of Disbursement*), provided that no event mentioned in Sub-Paragraph (b) of Article 2.6 (*Cancellation*) has occurred and is continuing, the Bank shall send to the Borrower a Disbursement Offer for the disbursement of a Tranche. The latest time for receipt by the Borrower of a Disbursement Offer is [*****] days before the relevant Final Availability Date. The Disbursement Offer shall specify:

- (a) the amount of the Tranche;
- (b) the Disbursement Date, which shall be a Relevant Business Day, falling at least [*****] days after the date of the Disbursement Offer and on or before the Final Availability Date;
- (c) the interest rate basis of the Tranche, namely the Deferred Interest Fixed Rate;
- (d) the terms and frequency for repayment of principal (bullet);
- (e) the Maturity Date / Repayment Date; and
- (f) the Disbursement Acceptance Deadline.

2.2.3 Disbursement Acceptance

- (a) The Borrower may accept a Disbursement Offer by delivering a Disbursement Acceptance to the Bank no later than the Disbursement Acceptance Deadline. The Disbursement Acceptance shall be signed by an Authorised Signatory with individual representation rights or 2 (two) or more Authorised Signatories with joint representation rights and shall specify the Disbursement Account to which disbursement of the Tranche should be made in accordance with Article 2.3 (*Disbursement Account*).
- (b) If a Disbursement Offer is duly accepted by the Borrower in accordance with its terms on or before the Disbursement Acceptance Deadline, and provided the conditions in Article 2.5.3 (*All Tranches – Other Conditions*) are met, the Bank shall make the Accepted Tranche available to the Borrower in accordance with the relevant Disbursement Offer and subject to the terms and conditions of this Contract.
- (c) The Borrower shall be deemed to have refused any Disbursement Offer which has not been duly accepted in accordance with its terms on or before the Disbursement Acceptance Deadline, in which case the Tranche shall not be made available to the Borrower by the Bank, and the Credit shall not be affected.

2.3 Disbursement Account

- (a) Disbursement shall be made to the Disbursement Account specified in the relevant Disbursement Acceptance, provided that such Disbursement Account is acceptable to the Bank.
- (b) Only one Disbursement Account may be specified for each Tranche.

2.4 Currency of disbursement

The Bank shall disburse each Tranche in EUR.

2.5 Conditions of Disbursement

2.5.1 Initial Documentary Conditions Precedent

No Disbursement Offer will be provided by the Bank under this Contract unless the Bank has confirmed that it has received all of the documents and other evidence listed in Part A of Schedule F (*Initial Documentary Conditions Precedent*) in form and substance satisfactory to it.

2.5.2 All Tranches - Documentary Conditions Precedent

No Disbursement Offer, including the first Disbursement Offer, will be provided by the Bank under this Contract unless the Bank has confirmed that it has received, in form and substance satisfactory to it:

- (a) a certificate from the Borrower in the form of Schedule D (*Form of Drawdown Certificate*), signed by one or more Authorised Signatories of the Borrower (as appropriate) and dated no earlier than the date falling 14 (fourteen) days before the relevant Disbursement Date;
- (b) a liquidity forecast for the next [*****] months of the Borrower; and
- (c) a certificate on the Borrower's solvency position signed by one or more Authorised Signatories of the Borrower (as appropriate) which confirms that the Borrower has sufficient resources to pay its debts as they fall due for at least [*****] months from the Disbursement Date, not taking into account the disbursement of the proposed Tranche, including, without limitation, a current extract from the commercial register (*Handelsregisterauszug*) of the Borrower and an up-to-date search on www.insolvenzbekanntmachungen.de in relation to the Borrower attached to such certificate.

2.5.3 All Tranches – Other Conditions

The Bank will only be obliged to make any Accepted Tranche available to the Borrower if on the Disbursement Date for the proposed Tranche:

- (a) the Repeating Representations are correct in all respects; and
- (b) no event or circumstance has occurred and is continuing which constitutes or would with the expiry of a grace period and/or the giving of notice under this Contract constitute:
 - (i) an Event of Default; or
 - (ii) a Prepayment Event, other than pursuant to Article 5.3.1 (*Cost Reduction*), or would, in each case, result from the disbursement of the proposed Tranche.

2.5.4 Tranche A – Additional Conditions Precedent

Without prejudice to the generality of Articles 2.5.1 (*Initial Documentary Conditions Precedent*) to 2.5.3 (*All Tranches – Other Conditions*), no Disbursement Offer will be provided by the Bank under this Contract in respect of Tranche A unless the Bank has confirmed that it has received in form and substance satisfactory to it:

- (a) evidence of Co-Funding to the Investment equal to the amount drawn under Tranche A; and
- (b) evidence that immunogenicity data has been generated in animals for the SARS-CoV-2 Vaccine candidate and that the immune response induced by the SARS-CoV-2 Vaccine candidate has been characterised; and

2.5.5 Tranche B – Additional Conditions Precedent

Without prejudice to the generality of Articles 2.5.1 (*Initial Documentary Conditions Precedent*) to 2.5.3 (*All Tranches – Other Conditions*), no Disbursement Offer will be provided by the Bank under this Contract in respect of Tranche B unless

- (a) Tranche A has been disbursed and the Bank has confirmed that it has received in form and substance satisfactory to it:
- (b) evidence of Co-Funding to the Investment equal to the amount drawn under Tranche B; and
- (c) evidence that the first patient has been successfully enrolled in a phase I clinical trial for a SARS-CoV-2 Vaccine.

2.5.6 Tranche C – Additional Conditions Precedent

Without prejudice to the generality of Articles 2.5.1 (*Initial Documentary Conditions Precedent*) to 2.5.3 (*All Tranches – Other Conditions*), no Disbursement Offer will be provided by the Bank under this Contract in respect of Tranche C unless

- (a) Tranche A and Tranche B have been disbursed and the Bank has confirmed that it has received in form and substance satisfactory to it:
- (b) evidence of Co-Funding to the Investment equal to the amount drawn under Tranche C; and
- (c) evidence that the detailed design process of GMP IV is completed; and
- (d) either of the following:
 - (i) evidence that
 - (1) the pivotal clinical trial for a SARS-CoV-2 Vaccine has met its endpoint and no further clinical supporting data is required to file for a marketing authorisation application in the EU for the SARS-CoV-2 Vaccine; and
 - (2) the necessary arrangements have been made with a contract supplier to provide fill and finish facilities for CureVac's SARS-CoV-2 Vaccine;

or

- (ii) evidence that CureVac has other products in the development pipeline targeting infectious disease, for which, subject to successful progress, CureVac will utilise GMP IV to manufacture a proprietary infectious disease medicinal product;

or

- (iii) evidence that CureVac is engaged in discussions with other companies for the manufacture of products targeting infectious diseases on behalf of said companies in CureVac's GMPIV facility.

2.6 Cancellation

- (a) The Borrower may send a written notice to the Bank requesting the cancellation of the undisbursed portion of the Credit. The written notice:
 - (i) must specify whether the Borrower would like to cancel the undisbursed portion of the Credit in whole or in part and, if in part, the amount of the Credit the Borrower would like to cancel; and
 - (ii) must not relate to an Accepted Tranche which has a Disbursement Date falling within [*****] Business Days of the date of the written notice.

Upon receipt of such written notice, the Bank shall cancel the requested undisbursed portion of the Credit with immediate effect.

- (b) At any time upon the occurrence of the following events, the Bank may notify the Borrower in writing that the undisbursed portion of the Credit shall be cancelled in whole or in part:
 - (i) a Prepayment Event, which in case of a cancellation pursuant to Article 5.3.1 (*Cost Reduction*) only shall be in respect of an amount equal to the amount by which it is entitled to cancel the Credit under such Article 5.3.1 (*Cost Reduction*);
 - (ii) an Event of Default or Default; or
 - (iii) an event or circumstance which would with the passage of time or giving of notice under this Contract constitute a Prepayment Event other than pursuant to Article 5.3.1 (*Cost Reduction*).

On the date of such written notification the relevant undisbursed portion of the Credit shall be cancelled with immediate effect.

2.7 Fee for cancellation of an Accepted Tranche

- (a) If pursuant to Sub-Paragraph (a) of Article 2.6 (*Cancellation*) the Borrower cancels an Accepted Tranche, the Borrower shall pay to the Bank the Cancellation Fee in accordance with the terms of the Finance Fee Letter.
- (b) If pursuant to Sub-Paragraph (b) of Article 2.6 (*Cancellation*) the Bank cancels all or part of an Accepted Tranche, the Borrower shall pay to the Bank the Cancellation Fee in accordance with the terms of the Finance Fee Letter.
- (c) If an Accepted Tranche is not disbursed on the Disbursement Date because the conditions precedent set out in Article 2.5.3 (*All Tranches – Other Conditions*) are not satisfied on such date, such Tranche shall be cancelled and the Borrower shall pay to the Bank the relevant Cancellation Fee in accordance with the terms of the Finance Fee Letter.

2.8 Cancellation after expiry of the Credit

On the day following the Final Availability Date, and unless otherwise specifically agreed to in writing by the Bank, any part of the Credit in respect of which no Disbursement Acceptance has been received in accordance with Article 2.2.3 (*Disbursement Acceptance*) shall be automatically cancelled, without any notice being served by the Bank to the Borrower.

2.9 Drop Dead Fee

- (a) The Borrower shall pay to the Bank the Drop Dead Fee in accordance with the terms of the Finance Fee Letter.
- (b) For the avoidance of doubt, the Drop Dead Fee payable under the Finance Fee Letter is independent of any other fees stipulated in this Contract.

2.10 Sums due under Article 2

Sums due under this Article 2 shall be payable in EUR. Sums due under this Article 2 shall be payable within [*****] days of the Borrower's receipt of the Bank's demand or within any longer period specified in the Bank's demand.

ARTICLE 3

The Loan

3.1 Amount of Loan

The Loan shall comprise the aggregate amount of Tranches disbursed by the Bank under the Credit.

3.2 Currency of repayment, interest and other charges

- (a) Interest, Remuneration Payments, repayments and other charges payable in respect of each Tranche shall be made by the Borrower in EUR.
- (b) Any other payment shall be made in the currency specified by the Bank having regard to the currency of the expenditure to be reimbursed by means of that payment.

ARTICLE 4

Interest

4.1 Deferred Interest Fixed Rate

Interest shall accrue on the outstanding balance of each Tranche at the Deferred Interest Fixed Rate, and calculated on the basis of Article 6.1 (*Day count convention*), and such interest shall be due and payable on the Maturity Date of each Tranche or, where a Tranche is cancelled or prepaid, on the Prepayment Date. For the avoidance of doubt, any such interest shall not be capitalised and shall not bear interest (no compound interest (*Zinseszins*)) within the meaning of Section 248 para. 1 BGB).

4.2 Variable Remuneration

- (a) Subject to Paragraph (b) below, in addition to the interest payable pursuant to Article 4.1 (*Deferred Interest Fixed Rate*) above and in consideration of the Bank making the Credit available to the Borrower in accordance with this Contract, the Borrower hereby grants and reserves for the benefit of the Bank, irrespectively of the amount disbursed under this Contract, a participation in each Released Batch during the Remuneration Period equal to EUR [*****] ([*****] euros) per Released Batch (the "**Remuneration Payments**") and hereby undertakes to pay the relevant Remuneration Payments to the Bank subject to the terms of this Contract. For the avoidance of doubt and by way of distinction from a silent partnership (*stille Beteiligung*), the Bank does not participate in any loss of the Borrower or any other Group Company.

- (b) The obligation of the Borrower to make Remuneration Payments pursuant to Paragraph (a) above shall exist only for so long as and to the extent that a due Remuneration Payment together with the aggregate amount of all preceding Remuneration Payments does not exceed the Remuneration Cap. For the avoidance of doubts, the cumulative amount of Remuneration Payments shall not exceed the Remuneration Cap.
- (c) Each Remuneration Payment shall:
- (i) be determined by an Independent Expert (the “**Expert Determination**”);
 - (ii) be calculated on the actual number of Released Batches of the respective previous financial year (such information to be provided to the Bank by no later than March 1st of the current year); and
 - (iii) become due and payable on the relevant Remuneration Payment Date,
- within the Remuneration Period.
- (d) If the Bank and the Borrower have not appointed an Independent Expert within [*****] days of any such request, the Independent Expert shall be appointed by the President of the Chamber of Industry and Commerce Berlin (*Industrie- und Handelskammer Berlin*) upon application by either the Bank or the Borrower. The costs related to the Expert’s Determination shall be borne by the Borrower and the Expert’s Determination shall, in the absence of manifest error, be conclusive and binding on both parties to this Contract as to the matters to which it relates. The Borrower shall, within [*****] Business Days of delivery of the Expert’s Determination and upon the Bank’s demand, pay to the Bank the amount determined by the Expert Determination.
- (e) The Bank has at any time, and notwithstanding the Expert Determination referred to above, the right to request the validation of any calculation of the number of Batches by an auditor, at any point in time, at the expenses of the Borrower.
- (f) The Borrower shall, notwithstanding the Expert Determinations, permit an Auditor, at reasonable times and at reasonable notice, to audit the books and records maintained by the Borrower to ensure the accuracy of the Remuneration Payments. The cost of this audit shall be borne by the Borrower. If any such audit concludes that additional amounts are owed to the Bank, subject to the Remuneration Cap, the Borrower shall pay the Bank such additional amounts with interest in accordance with Article 4.3 (*Interest on overdue sums*) within [*****] days of the date of the completion of such audit.
- (g) Instead of Remuneration Payments on an annual basis pursuant to the preceding Paragraphs (a) to (d), the Borrower shall have the right (but no obligation) to buy back any unpaid Remuneration Payments at any time with at least 30 (thirty) calendar days prior notice in full with a cash payment equal to the higher of (the “**Buy-Back Amount**”):
- (i) EUR [*****]; and
 - (ii) “x-times” the disbursed amount under this Contract (irrespective of whether or not such amount is still outstanding), where “x” equals:
 - (1) [*****] during the first year after first disbursement under this Contract;
 - (2) [*****] during the second year after first disbursement under this Contract;
 - (3) [*****] during the third year after first disbursement under this Contract;
 - (4) [*****] during the fourth year after first disbursement under this Contract; and
 - (5) [*****] thereafter,

provided that the total Buy-Back Amount (cumulative) shall not exceed the Remuneration Cap. For the avoidance of doubt, the Remuneration Cap includes the Remuneration Payments already paid on an annual basis as well as the Buy-Back Amount.

- (h) In case a Tranche is cancelled, prepaid pursuant to Articles 5.2 (*Voluntary prepayment*) or 5.3 (*Compulsory prepayment*), or prepaid due to an Event of Default within the Remuneration Period, the Bank shall have the right (but not the obligation) to demand from the Borrower the payment of the Buy-Back Amount (up to the Remuneration Cap) at its discretion. The Borrower shall, within [*****] Business Days upon the Bank's demand, pay to the Bank the Buy-Back Amount.
- (i) For the avoidance of doubt, the Borrower's obligation under this Article 4.2 (*Variable Remuneration*) to make payments shall continue regardless of:
 - (i) any cancellation or prepayment in respect of a Tranche within the Remuneration Period pursuant to Articles 5.2 (*Voluntary prepayment*) or 5.3 (*Compulsory prepayment*), or
 - (ii) any repayment of a Tranche in accordance with Article 5.1 (*Normal repayment*),
 unless the Bank has exercised its rights under Paragraphs (h) of this Article 4.2 (*Variable Remuneration*) and the Borrower has made the payment required under such Paragraph.
- (j) The Borrower shall withhold any statutory withholding tax (*Kapitalertragssteuer*) from the Remuneration Payments and shall pay it to the competent tax office.
- (k) Sums due under this Article 4.2 (*Variable Remuneration*) shall be payable in EUR. For the calculation of the Remuneration Payment, where amounts relating to such calculation are received by the Borrower in currencies other than EUR, the applicable rate published by the European Central Bank in Frankfurt on the Business Day preceding the relevant Remuneration Payment Date shall apply to determine such amounts equivalent in EUR.

4.3 Interest on overdue sums

- (a) Without prejudice to Article 9 (*Events of default*) and by way of exception to Article 4.1 (*Deferred Interest Fixed Rate*), if the Borrower fails to pay any amount (other than any interest amount or any Remuneration Payment) payable by it under this Contract on its due date, interest shall accrue on any such overdue amount (other than any interest amount) from the due date to the date of actual payment at an annual rate equal to:
 - (i) for overdue sums related to a Tranche, the higher of (A) the applicable Deferred Interest Fixed Rate plus [*****]% ([*****] basis points) or (B) EURIBOR plus [*****]% ([*****] basis points);
 - (ii) for overdue sums other than under Sub-Paragraph (i) above, EURIBOR plus [*****]% ([*****] basis points),
 and shall be payable in accordance with the demand of the Bank.
- (b) If the Borrower fails to pay any interest amount or any Remuneration Payment due and payable by it under this Contract on its due date, it shall make a liquidated damages payment (*pauschalierter Schadensersatz*) from the due date up to the date of actual payment at an annual rate equal to the higher of (i) the applicable Fixed Rate plus [*****]% ([*****] basis points) or (ii) EURIBOR plus [*****]% ([*****] basis points), provided that the Borrower shall have the right to prove that no damages have arisen, or that damages have not arisen in the asserted amount. The amount determined in accordance with this Sub-Paragraph (b) of Article 4.3 (*Interest on overdue sums*) shall be payable in accordance with the demand of the Bank.
- (c) For the purpose of determining EURIBOR in relation to this Article 4.3 (*Interest on overdue sums*), the relevant periods within the meaning of Schedule B (*Definition of EURIBOR*) shall be successive periods of one month commencing on the due date.
- (d) If the overdue sum is in a currency other than the currency of the Loan, the relevant interbank rate that is generally retained by the Bank for transactions in that currency plus [*****]% ([*****] basis points) shall apply, calculated in accordance with the market practice for such rate.

ARTICLE 5

Repayment

5.1 Normal repayment

The Borrower shall repay each Tranche, together with all other amounts outstanding under this Contract in relation to that Tranche, in a single instalment on the Maturity Date of that Tranche.

5.2 Voluntary prepayment

5.2.1 Prepayment option

(a) Subject to Articles 5.2.2 (*Prepayment Fee*), 5.2.3 (*Prepayment mechanics*) and 5.4 (*General*), the Borrower may prepay all or part of any Tranche, together with accrued interest (including any interest under Article 4.1 (*Deferred Interest Fixed Interest*) and any Remuneration Payment (up to the Remuneration Cap) specified under Article 4.2 (*Variable Remuneration*)), any Prepayment Fee and indemnities if any, upon giving a Prepayment Request with at least [*****] calendar days prior notice specifying:

- (i) the Prepayment Amount;
- (ii) the Prepayment Date; and
- (iii) the Contract Number.

(b) The Prepayment Request shall be irrevocable.

5.2.2 Prepayment Fee

If the Borrower prepays a Tranche, the Borrower shall pay the relevant Prepayment Fee in accordance with the terms of the Finance Fee Letter.

5.2.3 Prepayment mechanics

Upon presentation by the Borrower to the Bank of a Prepayment Request, the Bank shall issue a Prepayment Notice to the Borrower, not later than [*****] days prior to the Prepayment Date. The Prepayment Notice shall specify the Prepayment Amount, the accrued interest due thereon, the Remuneration Payments and the Prepayment Fee. If the Prepayment Notice specifies the Prepayment Fee, it shall also specify the deadline by which the Borrower may accept the Prepayment Notice, and the Borrower must accept the Prepayment Notice no later than such deadline as a condition to prepayment.

The Borrower shall make a prepayment in accordance with the Prepayment Notice and shall accompany the prepayment by the payment of accrued interest (including any interest under Articles 4.1 (*Deferred Interest Fixed Rate*) and any Remuneration Payment (up to the Remuneration Cap) specified under Article 4.2 (*Variable Remuneration*)) and the Prepayment Fee or indemnity, if any, due on the Prepayment Amount, as specified in the Prepayment Notice, and shall identify the Contract Number in the prepayment transfer.

5.3 Compulsory prepayment

5.3.1 Cost Reduction

If the total cost of the Investment at completion by the final date specified in the Technical Description falls below the figure stated in Recital (A) so that the amount of the Credit exceeds 50% (fifty per cent.) of such total cost, the Bank may forthwith, by notice to the Borrower, cancel the undisbursed portion of the Credit and/or demand prepayment of the Loan Outstanding up to the amount by which the Credit exceeds 50% (fifty per cent.) of the total cost of the Investment.

5.3.2 Change Events

The Borrower shall promptly inform the Bank if:

- (a) a Change-of-Control Event has occurred or is likely to occur in respect of itself or a Guarantor;
- (b) there is or is likely to be an enactment, promulgation, execution or ratification of or any change in or amendment to any law, rule or regulation (or in the application or official interpretation of any law, rule or regulation) that occurs or is likely to occur after the date of this Contract and which, in the opinion of the Borrower, would impair an Obligor's ability to perform its obligations under the Finance Documents; or
- (c) a Senior Management Change has occurred or is likely to occur.

In such case, or if the Bank has reasonable cause to believe that a Change-of-Control Event, a Change-of-Law Event or a Senior Management Change has occurred or is likely to occur, the Borrower shall, on request of the Bank, consult with the Bank as to the impact of such event. If [*****] days have passed since the date of such request and the Bank is of the opinion that the effects of such event cannot be mitigated to its satisfaction, or in any event if a Change-of-Control Event, Change-of-Law Event or Senior Management Change has actually occurred, the Bank may by notice to the Borrower, cancel the undisbursed portion of the Credit and/or demand prepayment of the Loan Outstanding, together with accrued interest and all other amounts accrued or outstanding under this Contract.

5.3.3 Illegality

If it becomes unlawful in any applicable jurisdiction for the Bank to perform any of its obligations as contemplated in this Contract or to fund or maintain the Loan, the Bank shall promptly notify the Borrower and may immediately cancel the undisbursed portion of the Credit and/or demand prepayment of the Loan Outstanding, together with accrued interest and all other amounts accrued or outstanding under this Contract.

5.3.4 Disposals

If the Borrower disposes of assets forming part of the Investment or shares in subsidiaries holding assets forming part of the Investment, without the approval of the Bank or not in accordance with Sub-Paragraph (b) of Paragraph 7 (*Disposal of assets*) of Schedule H (*General Undertakings*), then the Borrower shall apply all proceeds of such disposal to prepay the Loan Outstanding (in part or in whole), together with accrued interest, promptly following receipt of such proceeds in accordance with Sub-Paragraph (b) of Paragraph 7 (*Disposal of assets*) of Schedule H (*General Undertakings*).

5.3.5 Expiry of Guarantee Agreement

- If:
- (a) a Guarantee Agreement has a shorter duration than this Contract (as modified, extended and/or prolonged from time to time); and
 - (b) on the date falling [*****] days prior to the initial expiry date or, as the case may be, to any subsequent expiry date agreed under that Guarantee Agreement, the Borrower has failed to procure extension of the duration of the obligations of that Guarantor under that Guarantee Agreement or, as the case may be, to replace that Guarantor by another guarantor on terms acceptable to the Bank or provide additional security for the Loan in manner, form and substance satisfactory to the Bank,

the Bank may, without prejudice to its other rights, require the Borrower to prepay the Loan Outstanding (in part or in whole), together with accrued interest (if any) and all other amounts accrued or outstanding under this Contract.

5.3.6 Pari Passu to Non-EIB Financing

- If:
- (a) a Voluntary Non EIB Prepayment has occurred the Bank may, by notice to the Borrower, cancel the undisbursed portion of the Credit and demand prepayment of the Loan; or

- (b) (i) a Voluntary Non EIB Prepayment is likely to occur, (ii) the Bank has requested a consultation in respect of such Voluntary Non EIB Prepayment, (iii) the Borrower has complied with such request (to the satisfaction of the Bank) and (iv) at least [*****] days have passed since the date of such request, the Bank may, by notice to the Borrower, cancel the undisbursed portion of the Credit and demand prepayment of the Loan; or
- (c) (i) a Voluntary Non EIB Prepayment is likely to occur, (ii) the Bank has requested a consultation in respect of such Voluntary Non EIB Prepayment, (iii) the Borrower has not complied with such request within a reasonable period set by the Bank and (iv) at least [*****] days have passed since the date of such request, the Bank may, by notice to the Borrower, cancel the undisbursed portion of the Credit and demand prepayment of the Loan.

The proportion of the Loan that the Bank may require to be prepaid shall in each case of Paragraphs (a) to (c) above be the same as the proportion that the prepaid amount of the Non-EIB Financing bears to the aggregate outstanding amount of all Non-EIB Financing.

5.3.7 Prepayment Fee

In the case of a Prepayment Event in relation to a Tranche (except pursuant to Article 5.3.3 (*Illegality*)), the Borrower shall pay the relevant Prepayment Fee in accordance with the terms of the Finance Fee Letter.

5.3.8 Prepayment mechanics

Any sum demanded by the Bank pursuant to Articles 5.3.1 (*Cost Reduction*) to 5.3.6 (*Pari Passu to Non-EIB Financing*) shall be paid on the date indicated by the Bank in its notice of demand, such date being a date falling not less than [*****] days from the date of the demand (or, if earlier, the last day of any applicable grace period permitted by law in respect of the event in Article 5.3.3 (*Illegality*)).

5.4 General

- (a) A repaid or prepaid amount may not be reborrowed.
- (b) If the Borrower prepays a Tranche on a date other than a relevant Repayment Date, or if the Bank exceptionally accepts, solely upon the Bank's discretion, a Prepayment Request with prior notice of less than [*****] calendar days, the Borrower shall pay to the Bank an administrative fee in such an amount as the Bank shall notify to the Borrower.

ARTICLE 6

Payments

6.1 Day count convention

Any amount due under this Contract and calculated in respect of a fraction of a year shall be determined based on a year of 360 (three hundred and sixty) days and a month of 30 (thirty) days.

6.2 Time and place of payment

- (a) If neither this Contract nor the Bank's demand specifies a due date, all sums other than sums of interest, indemnity and principal are payable within [*****] days of the Borrower's receipt of the Bank's demand.
- (b) Each sum payable by the Borrower under this Contract shall be paid to the following account:

Bank:	[*****]
City:	[*****]
Account number:	[*****]
SWIFT Code/BIC:	[*****]
Remark:	[*****]

or such other account notified by the Bank to the Borrower.

- (c) The Borrower shall provide the Contract Number as a reference for each payment made under this Contract.
- (d) Any disbursements by and payments to the Bank under this Contract shall be made using account(s) acceptable to the Bank. Any account in the name of the Borrower held with a duly authorised financial institution in the jurisdiction where the Borrower is incorporated or where the Investment is undertaken is deemed acceptable to the Bank.

6.3 No set-off by the Borrower

All payments to be made by the Borrower under this Contract shall be calculated and be made without (and free and clear of any deduction for) set-off or counterclaim, unless the counterclaim is undisputed (*unbestritten*) or has been confirmed in a final non-appealable judgement (*rechtskräftig festgestellt*).

6.4 Disruption to Payment Systems

If either the Bank determines (in its discretion) that a Disruption Event has occurred or the Bank is notified by the Borrower that a Disruption Event has occurred:

- (a) the Bank may, and shall if requested to do so by the Borrower, consult with the Borrower with a view to agreeing with the Borrower such changes to the operation or administration of this Contract as the Bank may deem necessary in the circumstances;
- (b) the Bank shall not be obliged to consult with the Borrower in relation to any changes mentioned in Sub-Paragraph (a) of Article 6.4 (*Disruption to Payment Systems*) above if, in its opinion, it is not practicable to do so in the circumstances and, in any event, shall have no obligation to agree to such changes; and
- (c) the Bank shall not be liable for any damages, costs or losses whatsoever arising as a result of a Disruption Event or for taking or not taking any action pursuant to or in connection with this Article 6.4 (*Disruption to Payment Systems*).

6.5 Application of sums received

6.5.1 General

Sums received from the Borrower shall only discharge its payment obligations if and when received in accordance with the terms of this Contract.

6.5.2 Partial payments

If the Bank receives a payment that is insufficient to discharge all the amounts then due and payable by the Borrower under this Contract, the Bank shall apply that payment in or towards payment of:

- (a) first, any unpaid fees, costs, indemnities and expenses due under this Contract;
- (b) secondly, any accrued interest due but unpaid under this Contract;
- (c) thirdly, any principal due but unpaid under this Contract; and
- (d) fourthly, any Remuneration Payments due but unpaid under this Contract; and
- (e) lastly, any other sum due but unpaid under this Contract.

6.5.3 Allocation of sums related to Tranches

- (a) Sums received by the Bank following a partial prepayment pursuant to Article 5.3 (Compulsory prepayment) or a demand under Article 9.1 (*Right to demand repayment*) and applied to a Tranche, shall reduce the outstanding instalments in inverse order of maturity. The Bank may apply sums received between Tranches at its discretion.
- (b) In case of receipt of sums which cannot be identified as applicable to a specific Tranche, and on which there is no agreement between the Bank and the Borrower on their application, the Bank may apply these between Tranches at its discretion.

ARTICLE 7

Borrower undertakings and representations

- (a) The Borrower makes the representations and warranties set out in Schedule G (*Representations and Warranties*) to the Bank on the date of this Contract in respect of itself and, where applicable, the other Obligor.
- (b) The Repeating Representations are deemed to be made by the Borrower (in respect of itself and, where applicable, the other Obligors) on the date of each Disbursement Acceptance, each Disbursement Date, Remuneration Payment Date and each Repayment Date by reference to the facts and circumstances then existing.
- (c) The undertakings in Schedule H (*General Undertakings*) and Schedule I (*Information and Visits*) remain in force from the date of this Contract for so long as any amount is outstanding under this Contract or the Credit is available.

ARTICLE 8

Charges and expenses

8.1 Taxes, duties and fees

The Borrower shall pay all Taxes, duties, fees and other impositions of whatsoever nature, including stamp duty and registration fees, arising out of the execution or implementation of each Finance Document or any related document and the creation, perfection, registration or enforcement of any security for the Loan to the extent applicable.

The Borrower shall pay all principal, interest, Remuneration Payments, indemnities and other amounts due under this Contract gross without any withholding or deduction of any national or local impositions whatsoever, provided that if the Borrower is required by law or an agreement with a governmental authority or otherwise to make any such withholding or deduction, it will gross up the payment to the Bank so that after withholding or deduction, the net amount received by the Bank is equivalent to the sum due.

8.2 Other charges

- (a) The Borrower shall bear all charges and expenses, including any notarial and legal fees, professional, banking or exchange charges:
 - (i)
 - (1) reasonably incurred in connection with the preparation, execution and implementation; and
 - (2) incurred in connection with the enforcement and termination,

of the Finance Documents (including, but not limited to, any Guarantee Agreement entered into pursuant to Paragraph 17 (*Guarantees*) of Schedule H (*General Undertakings*)); and

(ii) incurred in connection with any related document, any amendment, supplement or waiver in respect of the Finance Documents or any related document; and

(iii)

(1) reasonably incurred in connection with the amendment, creation and management; and

(2) incurred in connection with the enforcement and realisation, of any security for the Loan.

(b) The Bank shall provide documentary support for any such charges or expenses upon the Borrower's request.

8.3 Increased costs, indemnity and set-off

(a) The Borrower shall pay to the Bank any costs or expenses incurred or suffered by the Bank as a consequence of the introduction of or any change in (or in the interpretation, administration or application of) any law or regulation or compliance with any law or regulation which occurs after the date of this Contract, in accordance with or as a result of which (i) the Bank is obliged to incur additional costs in order to fund or perform its obligations under this Contract, or (ii) any amount owed to the Bank under this Contract or the financial income resulting from the granting of the Credit or the Loan by the Bank to the Borrower is reduced or eliminated.

(b) Without prejudice to any other rights of the Bank under this Contract or under any applicable law, the Borrower shall indemnify and hold the Bank harmless from and against any loss incurred as a result of any full or partial discharge that takes place in a manner other than as expressly set out in this Contract.

(c) The Bank may set off any matured obligation due from the Borrower under any Finance Document (to the extent beneficially owned by the Bank) against any satisfiable (*erfüllbar*) obligation (within the meaning of Section 387 BGB) owed by the Bank to the Borrower regardless of the place of payment, booking branch or currency of either obligation. If the obligations are in different currencies, the Bank may convert either obligation at a market rate of exchange in its usual course of business for the purpose of the set-off. If either obligation is unliquidated or unascertained, the Bank may set off in an amount estimated by it in good faith to be the amount of that obligation.

ARTICLE 9

Events of default

9.1 Right to demand repayment

The Bank may demand (in writing) without prior notice or any judicial or extra judicial step immediate repayment by the Borrower of all or part of the Loan Outstanding (as requested by the Bank), together with accrued interest, any Remuneration Payment, any Prepayment Fee and all other accrued or outstanding amounts under this Contract, if:

(a) any amount payable pursuant to any Finance Document is not paid on the due date at the place and in the currency in which it is expressed to be payable, unless (i) its failure to pay is caused by an administrative or technical error or a Disruption Event and (ii) payment is made within [*****] Business Days of its due date;

(b) any information or document given to the Bank by or on behalf of any Obligor or any representation, warranty or statement made or deemed to be made by the Borrower in, pursuant to or for the purpose of entering into any Finance Document or in connection with the negotiation or performance of any Finance Document is or proves to have been incorrect, incomplete or misleading in any material respect;

(c) following any default of any Obligor in relation to any loan, or any obligation arising out of any financial transaction, other than the Loan,

- (i) such Obligor is required or is capable of being required or will, following expiry of any applicable contractual grace period, be required or be capable of being required to prepay, discharge, close out or terminate ahead of maturity such other loan or obligation; or
 - (ii) any financial commitment for such other loan or obligation is cancelled or suspended.
- (d) any Obligor is or admits to be unable to pay its debts as they fall due, or suspends any of its debts, or makes or seeks to make a composition with its creditors including a moratorium, or commences negotiations with one or more of its creditors with a view to rescheduling any of its financial indebtedness;
 - (e) any corporate action, legal proceedings or other procedure or step is taken in relation to the suspension of payments, a moratorium of any indebtedness, dissolution, administration or reorganisation (by way of voluntary arrangement, scheme of arrangement or otherwise) or an order is made or an effective resolution is passed for the winding up of any Obligor, or if any Obligor takes steps towards a substantial reduction in its capital, is declared insolvent or ceases or resolves to cease to carry on the whole or any substantial part of its business or activities or any situation similar to any of the above occurs under any applicable law;
 - (f) if the DH Convertible Loan Agreement is repaid, but the DH Investment is not made by 31 December 2020;
 - (g) any Obligor incorporated in Germany is unable to pay its debts as they fall due (*zahlungsunfähig*) within the meaning of Section 17 InsO or is overindebted (*überschuldet*) within the meaning of Section 19 InsO;
 - (h) an encumbrancer takes possession of, or a receiver, liquidator, administrator, administrative receiver or similar officer is appointed, whether by a court of competent jurisdiction or by any competent administrative authority or by any person, of or over, any part of the business or assets of any Obligor or any property forming part of the Investment;
 - (i) any Obligor defaults in the performance of any obligation in respect of any other loan granted by the Bank or financial instrument entered into with the Bank;
 - (j) any Obligor defaults in the performance of any obligation in respect of any other loan made to it from the resources of the Bank or the European Union;
 - (k) any distress, execution, sequestration or other process is levied or enforced upon the property of any Obligor or any property forming part of the Investment and is not discharged or stayed within [*****] days;
 - (l) a Material Adverse Change occurs, as compared with the position at the date of this Contract;
 - (m) it is or becomes unlawful for any Obligor to perform any of its obligations under the Finance Documents, or the Finance Documents are not effective in accordance with its terms or is alleged by any Obligor to be ineffective in accordance with its terms; or
 - (n) any Obligor fails to comply with any other provision under the Finance Documents (including, without limitation, each of the undertakings in Schedule H (*General Undertakings*) and Schedule I (*Information and Visits*)), unless the non-compliance or circumstance giving rise to the non-compliance is capable of remedy and is remedied within [*****] Business Days from the earlier of the Borrower becoming aware of the non-compliance and a notice served by the Bank on the Borrower.

9.2 **Other rights at law**

Article 9.1 (*Right to demand repayment*) shall not restrict any other right of the Bank at law (e.g. pursuant to Sections 314 or 490 BGB) to require prepayment of the Loan Outstanding together with any sum, interest, fee or accrued amount, irrespectively of the fact that this Contract might convert into a so called settlement contractual relationship (*Abwicklungsschuldverhältnis*).

9.3 Prepayment Fee

In case of demand under Article 9.1 (*Right to demand repayment*), the Borrower shall pay the Bank the amount demanded together with the relevant Prepayment Fee.

9.4 Non-Waiver

No failure or delay or single or partial exercise by the Bank in exercising any of its rights or remedies under this Contract shall be construed as a waiver of such right or remedy. The rights and remedies provided in this Contract are cumulative and not exclusive of any rights or remedies provided by law.

ARTICLE 10

Law and jurisdiction, miscellaneous

10.1 Governing Law

This Contract and any non-contractual obligations arising out of or in connection with it shall be governed by the laws of Germany.

10.2 Jurisdiction

- (a) The courts of Frankfurt am Main, Germany have exclusive jurisdiction to settle any dispute (a “**Dispute**”) arising out of or in connection with this Contract (including a dispute regarding the existence, validity or termination of this Contract or the consequences of its nullity) or any non-contractual obligation arising out of or in connection with this Contract.
- (b) The parties agree that the courts of Frankfurt am Main, Germany are the most appropriate and convenient courts to settle Disputes between them and, accordingly, that they will not argue to the contrary.
- (c) This Article 10.2 (*Jurisdiction*) is for the benefit of the Bank only. As a result and notwithstanding Sub-Paragraph (a) above, it does not prevent the Bank from taking proceedings relating to a Dispute in any other courts with jurisdiction. To the extent allowed by law, the Bank may take concurrent proceedings in any number of jurisdictions.

10.3 Place of performance

Unless otherwise specifically agreed by the Bank in writing, the place of performance under this Contract, shall be the seat of the Bank.

10.4 Evidence of sums due

In any legal action arising out of this Contract the certificate of the Bank as to any amount or rate due to the Bank under this Contract shall, in the absence of manifest error, be prima facie evidence of such amount or rate.

10.5 Third party rights

A person who is not a party to this Contract has no right to enforce or to enjoy the benefit of any term of this Contract (no *echter Vertrag zugunsten Dritter* within the meaning of Section 328 para. 1 BGB).

10.6 Entire Agreement

This Contract (together with the other Finance Documents) constitutes the entire agreement between the Bank and the Borrower in relation to the provision of the Credit hereunder, and supersedes any previous agreement, whether express or implied, on the same matter.

10.7 Invalidity

If at any time any term of this Contract is or becomes illegal (*nichtig*), invalid or unenforceable in any respect, or this Contract is or becomes ineffective (*unwirksam*) in any respect, under the laws of any jurisdiction, such illegality (*Nichtigkeit*), invalidity, unenforceability or ineffectiveness (*Unwirksamkeit*) shall indisputably (*unwiderlegbar*) not affect:

- (a) the legality, validity or enforceability in that jurisdiction of any other term of this Contract or the effectiveness in any other respect of this Contract in that jurisdiction; or
- (b) the legality, validity or enforceability in other jurisdictions of that or any other term of this Contract or the effectiveness of this Contract under the laws of such other jurisdictions,

without any party to this Contract having to argue (*darlegen*) and prove (*beweisen*) such party's intent to uphold this Contract even without the void, invalid or ineffective provisions.

The illegal, invalid, unenforceable or ineffective provision shall be deemed replaced by such legal, valid, enforceable and effective provision that in legal and economic terms comes closest to what the parties to this Contract intended or would have intended in accordance with the purpose of this Contract if they had considered the point at the time of conclusion of this Contract. The same applies in the event that this Contract or any other Finance Document does not contain a provision which it needs to contain in order to achieve the economic purpose as expressed herein (*Regelungslücke*).

10.8 Amendments

Any amendment to this Contract (including this Article 10.8) or any other Finance Document shall be made in writing (or in notarial form, if required) and shall be signed by the parties hereto.

10.9 Counterparts

This Contract may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Each counterpart is an original, but all counterparts shall together constitute one and the same instrument.

10.10 Assignment and transfer by the Bank

- (a) The Bank may assign or transfer (by way of novation, assumption of contract (*Vertragsübernahme*), sub-participation or otherwise) all or part of its rights, benefits or obligations under the Finance Documents. The Borrower herewith consents to any such assignment or transfer.
- (b) The Bank shall have the right to disclose all information relating to or concerning the Borrower, the Group, the Finance Documents and the Loan in connection with or in contemplation of any such assignment or transfer.

ARTICLE 11

Final Articles

11.1 Notices

11.1.1 Form of notice

- (a) Any notice or other communication given under this Contract must be in writing and, unless otherwise stated, may be made by letter or electronic mail.
- (b) Notices and other communications for which fixed periods are laid down in this Contract or which themselves fix periods binding on the addressee, may be made by hand delivery, registered letter or by electronic mail. Such notices and communications shall be deemed to have been received by the other party:

- (i) on the date of delivery in relation to a hand-delivered or registered letter; or
 - (ii) in the case of any electronic mail, only when actually received in readable form and in the case of an electronic mail sent by an Obligor to the Bank only if it is addressed in such a manner as the Bank shall specify for this purpose.
- (c) Any notice provided by an Obligor to the Bank by electronic mail shall:
- (i) mention the Contract Number in the subject line; and
 - (ii) be in the form of a non-editable electronic image (pdf, tif or other common non-editable file format agreed between the parties) of the notice signed by one or more Authorised Signatories of the Borrower as appropriate, attached to the electronic mail.
- (d) Notices issued by the Borrower pursuant to any provision of this Contract shall, where required by the Bank, be delivered to the Bank together with satisfactory evidence of the authority of the person or persons authorised to sign such notice on behalf of the Borrower and the authenticated specimen signature of such person or persons.
- (e) Without affecting the validity of electronic mail or communication made in accordance with this Article 11.1 (*Notices*), the following notices, communications and documents shall also be sent by registered letter to the relevant party at the latest on the immediately following Business Day:
- (i) Disbursement Acceptance;
 - (ii) any notices and communication in respect of the cancellation of a disbursement of any Tranche, Prepayment Request, Prepayment Notice, Event of Default, any demand for prepayment, and
 - (iii) any other notice, communication or document required by the Bank.
- (f) The parties agree that any above communication (including via electronic mail) is an accepted form of communication, shall constitute admissible evidence in court and shall have the same evidential value as an agreement under hand.
- (g) Any communication or document made or delivered to the Borrower in accordance with this Article 11.1 (*Notices*) will be deemed to have been made or delivered to each of the Obligors or any other member of the Group party to a Finance Document. Each Obligor incorporated in Germany, for this purpose, appoints the Borrower as its receipt agent (*Empfangsboten*).

11.1.2 Addresses

The address and electronic mail address (and the department or officer, if any, for whose attention the communication is to be made) of each party for any communication to be made or document to be delivered under or in connection with this Contract is:

For the Bank

Attention: [*****]
 100 boulevard Konrad Adenauer
 L-2950 Luxembourg
 Email address: [*****]

For the Borrower

Attention: [*****]
 Friedrich-Miescher-Str 15
 72076 Tübingen
 Germany
 Email address: [*****]
 [*****]

11.1.3 Demand after notice to remedy

The Bank and the Borrower shall promptly notify the other party in writing of any change in their respective communication details.

11.2 English language

- (a) Any notice or communication given under or in connection with this Contract must be in English.
- (b) To the extent required by local law, Security Documents shall be in the language required under the relevant local law; in particular any documentation in relation to the Land Charge to be filed with the land register (*Grundbuchamt*) shall be in German.
- (c) All other documents provided under or in connection with this Contract must be:
 - (i) in English; or
 - (ii) if not in English, and if so required by the Bank, accompanied by a certified English translation and, in this case, the English translation will prevail.

11.3 Conclusion of this Contract (Vertragsschluss)

- (a) The parties to this Contract may choose to conclude this Contract by an exchange of signed signature page(s), transmitted by any means of telecommunication (*telekommunikative Übermittlung*) such as by way of fax or attached as an electronic photocopy (.pdf, .tif, etc) to electronic mail.
- (b) If the parties to this Contract choose to conclude this Contract pursuant to this Article 11.3 (*Conclusion of this Contract (Vertragsschluss)*), they will transmit the signed signature page(s) of this Contract to [*****] (each a “**Recipient**”). This Contract will be considered concluded once a Recipient has actually received the signed signature page(s) (*Zugang der Unterschriftsseite(n)*) from both parties to this Contract (whether electronic photocopy or other means of telecommunication and at the time of the receipt of the last outstanding signature page(s) by such one Recipient).
- (c) For the purposes of this Article 11.3 (*Conclusion of this Contract (Vertragsschluss)*) only, the parties to this Contract appoint each Recipient as their attorney (*Empfangsvertreter*) and expressly allow (*gestatten*) each Recipient to collect the signed signature page(s) from both and for both parties to this Contract. For the avoidance of doubt, each Recipient will have no further duties connected with its position as Recipient. In particular, each Recipient may assume the conformity to the authentic original(s) of the signature page(s) transmitted to it by means of telecommunication, the genuineness of all signatures on the original signature page(s) and the signing authority of the signatories.
- (d) For the purposes of proof and confirmation, each party to this Contract has to provide the Recipients with original signature page(s) promptly, but no later than [*****] Business Days, after signing this Contract in accordance with this Article 11.3 (*Conclusion of this Contract (Vertragsschluss)*). The Bank may demand that the Borrower subsequently sign one or more copies of this Contract.

IN WITNESS WHEREOF the parties hereto have caused this Contract to be executed in three (3) originals (two (2) originals for the Bank and one (1) original for the Borrower) in the English language.

Signed for and on behalf of
EUROPEAN INVESTMENT BANK

Signed for and on behalf of
CUREVAC REAL ESTATE GMBH

/s/ Tero PIETILA

/s/ Ayse Nil ADA

Name: Tero PIETILA

Name: Ayse Nil ADA

Name:

Name:

Title: Head of Division

Title: Legal Counsel

Title:

Title:

IN WITNESS WHEREOF the parties hereto have caused this Contract to be executed in three (3) originals (two (2) originals for the Bank and one (1) original for the Borrower) in the English language.

Signed for and on behalf of
EUROPEAN INVESTMENT BANK

Signed for and on behalf of
CUREVAC REAL ESTATE GMBH

		<u>/s/ Florian von der Mülbe</u>	<u>/s/ Reinhard Rapp</u>
Name:	Name:	Name: Florian von der Mülbe	Name: Reinhard Rapp
Title:	Title:	Title: Managing Director	Title: Managing Director

Investment Specification and Reporting

A.1 Technical Description

[*****]

A.2 Information Duties

1. Dispatch of information: designation of the person responsible

The information below has to be sent to the Bank under the responsibility of:

	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]
[*****]	[*****]

The above-mentioned contact person(s) is (are) the responsible contact(s) for the time being.

The Borrower shall inform the EIB immediately in case of any change.

2. Information on the project's implementation

The Borrower shall deliver to the Bank the following information on project progress during implementation at the latest by the deadline indicated below.

[*****]	[*****]	[*****]
[*****]	[*****]	[*****]

3. Information on the end of works and first year of operation

The Borrower shall deliver to the Bank the following information on project completion and initial operation at the latest by the deadline indicated below.

*****	*****
*****	*****

Language of reports	<i>English</i>
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Definitions of EURIBOR

EURIBOR

“EURIBOR” means:

[*****]

Form of Disbursement Offer/Acceptance

To: CureVac Real Estate GmbH

From: European Investment Bank

Date:

Subject: Disbursement Offer/Acceptance for the Finance Contract between European Investment Bank and CureVac Real Estate GmbH dated [*****] (the "**Finance Contract**")

Contract Number [*****]

Serapis Number [*****]

Dear Sirs,

We refer to the Finance Contract. Terms defined in the Finance Contract have the same meaning when used in this letter.

Following your request for a Disbursement Offer from the Bank, in accordance with Article 2.2.2 (*Disbursement Offer*) of the Finance Contract, we hereby offer to make available to you the following Tranche:

- (a) Tranche [A/B/C]
- (b) Amount to be disbursed:
- (c) Disbursement Date:
- (d) Deferred Interest Fixed Rate:
- (e) Repayment Date:
- (f) Terms and frequency for repayment of principal:
- (g) Maturity Date:

To make the Tranche available subject to the terms and conditions of the Finance Contract, the Bank must receive a Disbursement Acceptance in the form of a copy of this Disbursement Offer duly signed on your behalf, to the following electronic mail [·] no later than the Disbursement Acceptance Deadline of [time], Luxembourg time, on [date].

The Disbursement Acceptance below must be signed by an Authorised Signatory and must be fully completed as indicated, to include the details of the Disbursement Account.

If not duly accepted by the above stated time, the offer contained in this document shall be deemed to have been refused and shall automatically lapse.

If you do accept the Tranche as described in this Disbursement Offer, all the related terms and conditions of the Finance Contract shall apply, in particular, the provisions of Article 2.5 (*Conditions of Disbursement*).

Yours faithfully,

EUROPEAN INVESTMENT BANK

We hereby accept the above Disbursement Offer for and on behalf of the Borrower:

Date:

Account to be credited¹:

Account N°:

Account Holder/Beneficiary:

(please, provide IBAN format if the country is included in IBAN Registry published by SWIFT, otherwise an appropriate format in line with the local banking practice should be provided)

Bank name, identification code (BIC) and address:

Payment details to be provided:

Please transmit information relevant to:

Name(s) of the Borrower's Authorised Signatory(ies):

Signature(s) of the Borrower's Authorised Signatory(ies):

Name(s) / Title(s)

IMPORTANT NOTICE TO THE BORROWER:

BY COUNTERSIGNING ABOVE YOU CONFIRM THAT THE LIST OF AUTHORISED SIGNATORIES AND ACCOUNTS PROVIDED TO THE BANK WAS DULY UPDATED PRIOR TO THE PRESENTATION OF THE ABOVE DISBURSEMENT OFFER BY THE BANK.

IN THE EVENT THAT ANY SIGNATORIES OR ACCOUNTS APPEARING IN THIS DISBURSEMENT ACCEPTANCE ARE NOT INCLUDED IN THE LATEST LIST OF AUTHORISED SIGNATORIES AND ACCOUNTS RECEIVED BY THE BANK, THE ABOVE DISBURSEMENT OFFER SHALL BE DEEMED AS NOT HAVING BEEN MADE.

¹ The details concerning banking intermediary are also to be provided if such intermediary has to be used to make the transfer to the Beneficiary's Account.

Form of Drawdown Certificate

To: European Investment Bank

From: CureVac Real Estate GmbH

Date:

Subject: Finance Contract between European Investment Bank and CureVac Real Estate GmbH dated [*****] (the “**Finance Contract**”)

Contract Number [*****]

Serapis Number [*****]

Dear Sirs,

Terms defined in the Finance Contract have the same meaning when used in this letter.

For the purposes of Article 2.5 (*Conditions of Disbursement*) of the Finance Contract we hereby certify to you as follows:

- (a) no Prepayment Event has occurred and is continuing;
- (b) no security of the type prohibited under Paragraph 24 (*Negative pledge*) of Schedule H (*General Undertakings*) has been created or is in existence;
- (c) there has been no material change to any aspect of the Investment or in respect of which we are obliged to report under the Finance Contract, save as previously communicated by us;
- (d) no Default, Event of Default or a Prepayment Event other than pursuant to Article 5.3.1 (*Cost Reduction*) of the Finance Contract has occurred or is continuing, or would, in each case, result from the disbursement of the proposed Tranche;
- (e) no litigation, arbitration administrative proceedings or investigation is current or to our knowledge is threatened or pending before any court, arbitral body or agency which has resulted or if adversely determined is reasonably likely to result in a Material Adverse Change, nor is there subsisting against us or any of our subsidiaries any unsatisfied judgement or award;
- (f) the Repeating Representations are correct in all respects;
- (g) no Material Adverse Change has occurred, as compared with the situation at the date of the Finance Contract; and
- (h) the borrowing of the Credit, or any part thereof, by the Borrower is within the corporate powers of the Borrower.

Yours faithfully,

For and on behalf of CureVac Real Estate GmbH

Date:

Name(s) / Title(s)

Form of Compliance Certificate

To: European Investment Bank

From: CureVac Real Estate GmbH

Date:

Subject: Finance Contract between European Investment Bank and CureVac Real Estate GmbH dated [*****] (the “**Finance Contract**”)

Contract Number [*****]

Serapis Number [*****]

Dear Sirs,

We refer to the Finance Contract. This is a Compliance Certificate. Terms defined in the Finance Contract have the same meaning when used in this Compliance Certificate.

We hereby confirm:

- (a) [insert information regarding asset disposal];
- (b) [no security of the type prohibited under Paragraph 24 (*Negative pledge*) of Schedule H (*General Undertakings*) has been created or is in existence;]
- (c) [no Default, Event of Default or a Prepayment Event other than pursuant to Article 5.3.1 (Cost Reduction) of the Finance Contract has occurred or is continuing.] [*If this statement cannot be made, this certificate should identify any potential event of default that is continuing and the steps, if any, being taken to remedy it.*]

Yours faithfully,

For and on behalf of CureVac Real Estate GmbH

Name(s) / Title(s)

Conditions Precedent**Part A - Initial Documentary Conditions Precedent**

- (a) The following, duly executed Finance Documents:
- (i) originals of this Contract;
 - (ii) originals of the Guarantee Agreement with CureVac AG;
 - (iii) originals of each Security Document, including an enforceable copy (*vollstreckbare Ausfertigung*) of the Land Charge Creation Deed; and
 - (iv) originals of the Finance Fee Letter.
- (b) The constitutional documents of each Obligor, being in relation to an Obligor incorporated in Germany electronic copies of (i) an up-to-date (dated no earlier than the date falling [****] days before the Disbursement Date) electronic extract from the commercial register (*Handelsregisterauszug*), (ii) its articles of association (*Gesellschaftsvertrag*) and copies of any by-laws and rules of procedures (*Geschäftsordnungen*) and (iii) its list of shareholders (*Gesellschafterliste*) or list of supervisory board members (if applicable).
- (c) A copy of the resolution of the competent body (board of directors (*Vorstand*), supervisory board (*Aufsichtsrat*), administrative board (*Verwaltungsrat*) or general meeting of shareholders (*Gesellschafterversammlung*)) of each Obligor:
- (i) approving the terms of, and the transactions contemplated by, the Finance Documents to which it is a party as and duly authorising the execution of the Finance Documents to which it is a party;
 - (ii) duly authorising the relevant signatory or signatories to execute and perform the Finance Documents to which it is a party on its behalf; and
 - (iii) authorising the relevant signatory or signatories, on its behalf, to sign and/or despatch all documents and notices to be signed and/or despatched by it under or in connection with the Finance Documents to which it is a party.
- (d) An up-to-date (dated no earlier than the date falling [****] days before the Disbursement Date) structure chart showing the Group certified as being complete and correct by an Authorised Signatory of the Borrower provided such certification is dated no earlier than the date falling [****] days before the Disbursement Date.
- (e) A certificate of an Authorised Signatory of each Obligor certifying that each copy document relating to it specified in Paragraph (b) and (c) of this Part A of Schedule F (*Initial Documentary Conditions Precedent*) is correct, complete and in full force and effect as at a date no earlier than the date falling [****] days before the Disbursement Date.
- (f) The List of Authorised Signatories and Accounts.
- (g) A legal enforceability opinion of Noerr LLP, addressed to the Bank on the legality, validity and enforceability of the German law governed Finance Documents.
- (h) A legal enforceability opinion of Arendt & Medernach, addressed to the Bank on the legality, validity and enforceability of the Luxembourg law governed Finance Fee Letter.
- (i) A legal opinion of Baker McKenzie, legal adviser to the Borrower, addressed to the Bank, and dated no earlier than the date falling [****] days before the Disbursement Date:
- (i) which includes an insolvency search on www.insolvenzbekanntmachungen.de on the relevant Obligor conducted on the date of such legal opinion; and
 - (ii) on the due incorporation and valid existence of each Obligor, the authority and capacity of each Obligor to enter into the Finance Documents and perform its obligations thereunder, non-conflict with constitutional documents and on laws applicable to companies generally in Germany, no consents, registrations or filings are required and no stamp duty is to be paid in respect of the Finance Documents, all corporate and other action required to be taken has indeed been taken, the due execution of the Finance Documents, choice of law and enforceability of judgments and that the Obligor is not entitled to claim immunity.

- (j) The audited financial statements of the Obligor for the financial year 2019.
- (k) Evidence of payment of all the fees (including lawyer fees) and expenses as required under the Finance Documents.
- (l) A copy of any other document, authorisation, opinion or assurance which the Bank has notified the Borrower is necessary in connection with the entry into and performance of, and the transactions contemplated by, the Finance Documents or the validity and enforceability of the same.

Part B - Guarantor Conditions Precedent

- (a) The duly executed Guarantee Agreement or, as applicable, accession letter to the Guarantee Agreement.
- (b) The constitutional documents of such Guarantor(s).
- (c) If applicable, an original of a certificate of incorporation and an encumbrance certificate of the Guarantor(s) not incorporated or established in Germany (“**Non-German Guarantor**”) dated no more than [*****] Business Days from the date of execution of the Guarantee Agreement or accession letter to the Guarantee Agreement (as applicable) (or any equivalent document in the jurisdiction of incorporation of such Non-German Guarantor(s)).
- (d) A copy of the resolution of the competent body (board of directors, supervisory board (*Aufsichtsrat*), administrative body (*Verwaltungsrat*), advisory board (*Beirat*) or general meeting of shareholders (*Gesellschafterversammlung*)) of each Obligor:
 - (i) approving the terms of, and the transactions contemplated by, the Finance Documents to which it is a party as and duly authorising the execution of the Finance Documents to which it is a party;
 - (ii) duly authorising the relevant signatories to execute the Finance Documents to which it is a party on its behalf; and
 - (iii) authorising a signatory or signatories, on its behalf, to sign and/or despatch all documents and notices to be signed and/or despatched by it under or in connection with the Finance Documents to which it is a party.
- (e) A certificate of an authorised signatory of the respective Guarantor(s) certifying that each copy document relating to it specified in Paragraphs (b) to (d) of this Part B of Schedule F (*Conditions Precedent*) is correct, complete and in full force and effect as at a date no earlier than the date of their/its entry into or accession to the Guarantee Agreement, including a specimen of the signature of each person authorised by the resolution in Paragraph (d) above and, if applicable, confirming that guaranteeing or securing, as appropriate, the Loan would not cause any guarantee, security or similar limit or restriction binding on it to be exceeded.
- (f) A legal opinion of a reputable law firm, addressed to the Bank, on the valid existence of the Guarantor(s), the authority and capacity of the Guarantor(s) to enter into or accede to the Guarantee Agreement (and execute its/their obligations therein) and on the due execution of the Guarantee Agreement (or the accession letter).

- (g) Copies of such documentation and other evidence as the Bank may request to carry out and be satisfied with the results of all necessary “know your customer” requirements or other checks in relation to the identity of any person that it is required (in order to comply with applicable money laundering laws and regulations) to carry out in relation to the concerned Guarantor(s).

Representations and Warranties**1. Authorisations and Binding Obligations**

- (a) Each Obligor is duly incorporated and validly existing as a corporation or company with limited liability under the laws of its jurisdiction of incorporation. No Obligor's shares are publicly traded.
- (b) Each Obligor has the power to carry on its business as it is now being conducted and to own its property and other assets, and to execute, deliver and perform its obligations under the Finance Documents.
- (c) Each Obligor has obtained all necessary Authorisations in connection with the execution, delivery and performance of the Finance Documents and in order to lawfully comply with its obligations thereunder, and in respect of the Investment, and all such Authorisations are in full force and effect and admissible in evidence.
- (d) The execution and delivery of, the performance of each Obligor's obligations under and compliance with the provisions of the Finance Documents do not and will not contravene or conflict with:
 - (i) any applicable law, statute, rule or regulation, or any judgement, decree or permit to which it is subject;
 - (ii) any agreement or other instrument binding upon it which might reasonably be expected to have a material adverse effect on its ability to perform its obligations under the Finance Documents; or
 - (iii) any provision of its constitutional documents.
- (e) The obligations expressed to be assumed by each Obligor in each Finance Document to which it is a party are legal, valid, binding and enforceable obligations.

2. No default or other adverse event

- (a) There has been no Material Adverse Change since [*****]. *(Non-repeating)*
- (b) No event or circumstance which constitutes an Event of Default has occurred and is continuing unremedied or unwaived.

3. No proceedings

- (a) No litigation, arbitration, administrative proceedings or investigation is current or to its knowledge is threatened or pending before any court, arbitral body or agency which has resulted or if adversely determined is reasonably likely to result in a Material Adverse Change, nor is there subsisting against it or any of its Subsidiaries any unsatisfied judgement or award.
- (b) To the best of its knowledge and belief (having made due and careful enquiry) no material Environmental Claim has been commenced or is threatened against any Obligor.
- (c) As at the date of this Contract, no Obligor has taken any action to commence proceedings for, nor have any other steps been taken or legal proceedings commenced or, so far as the Borrower is aware, threatened against any Obligor for its insolvency, winding up or dissolution, or for any Obligor to enter into any arrangement or compositions for the benefit of creditors, or for the appointment of an administrator, receiver, administrative receiver, examiner, trustee or similar officer. *(Non-repeating)*

4. Security

It is the sole legal and beneficial owner and has good title to the assets which it charges or purports to charge pursuant to the Security Documents. At the date of this Contract, no Security exists over the assets of any Group Company other than Permitted Security.

5. Ranking

- (a) Its payment obligations under this Contract rank not less than *pari passu* in right of payment with all other present and future unsecured and unsubordinated obligations under any of its debt instruments except for obligations mandatorily preferred by law applying to companies generally.
- (b) No financial covenants have been concluded with any other creditor of any Obligor.
- (c) No Voluntary Non EIB Prepayment has occurred.

6. Anti-Corruption

- (a) Each Obligor is in compliance with all applicable European Union and its national legislation, including any applicable anti-corruption legislation.
- (b) To the best of its knowledge, no funds invested in the Investment by any Obligor or any other Group Company are of illicit origin, including products of money laundering or linked to the financing of terrorism.
- (c) No Obligor is engaged in any Criminal Offence and to the best of the Obligor's knowledge no Criminal Offence have occurred in connection with the Investment. (*Non-repeating*)

7. Accounting and Tax

- (a) The latest available consolidated and unconsolidated audited accounts of the Borrower and the other Obligors have been prepared on a basis consistent with previous years and have been approved by its auditors as representing a true and fair view of the results of its operations for that year and accurately disclose or reserve against all the liabilities (actual or contingent) of the Borrower and the other Obligors, as relevant.
- (b) The accounting reference date of the Borrower and each Obligor is 31 December.
- (c) No Obligor is required to make any deduction for or on account of any Tax from any payment it may make under the Finance Documents, except for withholding tax (*Kapitalertragssteuer*) which have to be deducted pursuant to Sub-Paragraph (j) of Article 4.2 (*Variable Remuneration*). (*Non-repeating*)
- (d) All Tax returns required to have been filed by each Obligor or on its behalf under any applicable law have been filed when due and contain the information required by applicable law to be contained in them.
- (e) Each Obligor has paid when due all Taxes payable by it under applicable law except to the extent that it is contesting payment in good faith and by appropriate means.
- (f) With respect to Taxes which have not fallen due or which it is contesting, each Obligor is maintaining reserves adequate for their payment and in accordance, where applicable, with GAAP.
- (g) Under the laws of the jurisdiction of incorporation of each Obligor, it is not necessary that the Finance Documents be filed, recorded or enrolled with any court or other authority or that any stamp, registration or similar tax be paid on or in relation to the Finance Documents, or the transactions contemplated by the Finance Documents, other than the official certification (*öffentliche Beglaubigung*) of the Land Charge Creation Deed (*Grundschuldbestellungsurkunde*) and payment of related notary fees and the registration of the Land Charge in the land register (*Grundbuch*) and payment of the related registration fees. (*Non-repeating*)

8. Information provided

- (a) Any factual information provided by any Group Company for the purposes of entering into this Contract and any related documentation was true and accurate in all material respects as at the date it was provided or as at the date (if any) at which it is stated and continues to be true and accurate in all material respect as at the date of this Contract. *(Non-repeating)*
- (b) The Group structure chart is true, complete and accurate in all material respects and represents the complete corporate structure of the Group as at the date of this Contract, and other than as set out therein the Borrower owns no other equity and/or shares in any other business entity. *(Non-repeating)*
- (c) As at the date of this Contract, (i) information provided by the Borrower during the due diligence in [*****] is complete, accurate and true in all respects. *(Non-repeating)*

9. No indebtedness

No Obligor has Indebtedness outstanding other than Permitted Indebtedness. *(Non-repeating)*.

10. No Immunity

No Obligor, nor any of its assets, is entitled to immunity from suit, execution, attachment or other legal process.

11. Pensions

The pension schemes for the time being operated by the Obligors (if any) are funded in accordance with their rules and to the extent required by law or otherwise comply with the requirements of any law applicable in the jurisdiction in which the relevant pension scheme is maintained.

General Undertakings**1. Use of Loan**

The Borrower shall use all amounts borrowed by it under the Loan to carry out the Investment. For the avoidance of doubt, the Loan shall in no case be used for the repayment of the DH Convertible Loan Agreement.

2. Completion of Investment

The Borrower shall or shall procure that the Investment is carried out in accordance with the Technical Description as may be modified from time to time with the approval of the Bank, and complete it by the final date specified therein.

3. Procurement procedure

The Borrower shall secure goods and services for the Investment (a) in so far as they apply to it or to the Investment, in accordance with EU Law in general and in particular with the relevant EU Directives, and (b) in so far as EU Directives do not apply, by procurement procedures which, to the satisfaction of the Bank, respect the criteria of economy and efficiency and, in case of public contracts, the principles of transparency, equal treatment and non-discrimination on the basis of nationality.

4. Compliance with laws

The Borrower shall comply in all respects with all laws and regulations to which it or the Investment is subject.

5. Environment

The Borrower shall:

- (i) implement and operate the Investment in compliance with Environmental Law;
- (ii) obtain, maintain and comply with requisite Environmental Approvals for the Investment, and upon becoming aware of any breach of this Paragraph 5 (*Environment*):
 - (i) the Borrower shall promptly notify the Bank;
 - (ii) the Borrower and the Bank will consult for up to [*****] Business Days from the date of notification with a view to agreeing the manner in which the breach should be rectified; and
 - (iii) the Borrower shall remedy the breach within [*****] Business Days of the end of the consultation period.

6. Integrity

The Borrower shall take, within a reasonable timeframe, appropriate measures in respect of any member of its management bodies who has been convicted by a final and irrevocable court ruling of a Criminal Offence perpetrated in the course of the exercise of his/her professional duties, in order to ensure that such member is excluded from any Borrower's activity in relation to the Loan or the Investment.

7. Disposal of assets

- (a) Except as provided under Sub-Paragraph (b) below, the Borrower shall not, and shall procure that none of its Subsidiaries shall, either in a single transaction or in a series of transactions whether related or not and whether voluntarily or involuntarily dispose of all or any part of any of its or its Subsidiaries business, undertaking or assets (including any shares, real estate or security of any entity or a business or undertaking, or any interest in any of them).
- (b) Sub-Paragraph (a) above does not apply to any such disposal (a “**Permitted Disposal**”):
- (i) made with the prior written consent of the Bank;
 - (ii) made on arm’s length terms in the ordinary course of business of the Borrower or one of its Subsidiaries, provided that these are made between Obligor only;
 - (iii) made on arm’s length terms and at fair market value for cash, which is reinvested in assets of comparable or superior type, value and quality;
 - (iv) made on arm’s length terms in exchange for other assets (other than shares, businesses and real estate) comparable or superior as to type, value and quality;
 - (v) by one of its Subsidiaries which is (A) an Obligor to another Obligor, or (B) not an Obligor to another Group Company which is not an Obligor;
 - (vi) constituted by a licence of Intellectual Property Rights on arm’s length terms in the ordinary course of business of the Borrower or any one of its Subsidiaries;
 - (vii) made in relation to non-material assets which have depreciated to less than [*****]% ([*****] per cent.) of their initial value or which are obsolete; or
 - (viii) arising as a result of Permitted Security,

provided that the disposal is not of assets forming part of the Investment or shares in subsidiaries holding assets forming part of the Investment, which may not be disposed of unless either (A) the Borrower consults the Bank in relation to such disposal, and the Bank approves the disposal, or (B) the proceeds of the disposal are applied to prepay the Bank in accordance with Article 5.3.4 (*Disposals*).

For the purposes of this Paragraph 7 (*Disposal of assets*), “dispose” and “disposal” includes any act effecting sale, transfer, lease or other disposal (*Verfügung*).

8. Maintenance of assets

The Borrower shall maintain, repair, overhaul and renew all assets required in relation to the Investment as required to keep such assets in good working order.

9. Insurances

The Borrower shall, and shall procure that each of its Subsidiaries shall, maintain insurances on and in relation to its business and assets with reputable underwriters or insurance companies against those risks and to the extent as is usual for companies carrying on the same or substantially similar business.

10. Change in business

The Borrower shall procure that no substantial change is made to the general nature of its business or the business of any of its Subsidiaries from that carried on at the date of this Contract.

11. Change in ownership

The Borrower will inform the Bank promptly about any intended change in any of its ownership.

12. Merger

The Borrower shall not, and shall procure that none of its Subsidiaries shall, enter into any amalgamation, demerger, merger or corporate reconstruction (including the conclusion of any domination and/or profit and loss transfer agreements (*Beherrschungsund/oder Gewinnabführungsverträge*) or any other enterprise agreements (*Unternehmensverträge*) with the meaning of section 291 AktG) unless:

- (a) with the prior written consent of the Bank; or
- (b) such amalgamation, demerger, merger or corporate reconstruction does not result in a Material Adverse Change and is on a solvent basis, and provided that:
 - (i) only Group Companies are involved and if a Guarantor is involved, the surviving entity will also be or become a Guarantor;
 - (ii) the resulting entity will not be incorporated or located in a country which is in a jurisdiction that is blacklisted by any Lead Organisation in connection with activities such as money laundering, financing of terrorism, tax fraud and tax evasion or harmful tax practices as such blacklist may be amended from time to time; and
 - (iii) if the Borrower is involved, (A) the rights and obligations of the Borrower under this Contract will remain with the Borrower, (B) the surviving entity will be the Borrower and the statutory seat of the Borrower would not as a result of such merger be transferred to a different jurisdiction, (C) the merger will not have an effect on the validity, legality or enforceability of the Borrower's obligations under this Contract; and (D) all of the business and assets of the Borrower are retained by it.

13. Books and records

The Borrower shall, and shall procure that each of its Subsidiaries shall ensure that it has kept and will continue to keep proper books and records of account, in which full and correct entries shall be made of all financial transactions and its assets and business, including expenditures in connection with the Investment, in accordance with GAAP as in effect from time to time.

14. Ownership

- (a) The Borrower shall maintain Control and shall, in any event and in addition, at all times maintain more than 50% (fifty per cent.) of the share capital, directly or indirectly of each of its Material Subsidiaries, unless a prior written consent of the Bank is received by the Borrower.
- (b) The Borrower shall immediately notify the Bank in the event of a new entity becoming a Subsidiary of the Borrower through any means, including but not limited to acquisition, creation and spin-off.
- (c) The undertakings in Sub-Paragraphs (a), and (b) above shall be calculated in accordance with GAAP as applied by the Borrower on the date of this Contract and as GAAP is amended from time to time and tested annually.

15. Acquisitions

The Borrower shall not, and shall procure that none of its Subsidiaries shall, invest in (including by way of payment into the capital reserve (*Kapitalrücklage*)) or acquire any entity or a business going concern or an undertaking (whether whole or substantially the whole of the assets or business), or any division or operating unit thereof, or any shares or securities of any entity or a business or undertaking (or in each case, any interest in any of them) (or agree to any of the foregoing), save for an acquisition or investment:

- (a) with the prior written consent of the Bank;
- (b) by one of its Subsidiaries which is an Obligor of an asset sold, leased, transferred or otherwise disposed of by another Obligor;
- (c) by one of its Subsidiaries of all the shares or other ownership interests in any limited liability company or corporation, limited liability partnership or any equivalent company, provided that:
 - (i) such entity has not yet commenced commercial operations;
 - (ii) such entity is incorporated in a country that is a member of either or both of the European Union or the Organisation of Economic Co-Operation and Development; and
 - (iii) no Event of Default is continuing on the date the relevant acquisition agreement is entered into or would occur as a result of the acquisition; or
- (d) of shares or other ownership interests in any limited liability company or corporation, limited liability partnership or any equivalent company, the consideration for which does not exceed an aggregate amount of EUR [*****] ([*****] euro) during any financial year, provided that:
 - (i) no Event of Default is continuing on the date the relevant acquisition agreement is entered into or would occur as a result of the acquisition;
 - (ii) the acquired entity is engaged in a business similar or complementary to the business carried on by the Group as at the date of this Contract;
 - (iii) the acquired entity is not incorporated or located in a jurisdiction that is blacklisted by any Lead Organisation in connection with activities such as money laundering, financing of terrorism, tax fraud and tax evasion or harmful tax practices as such blacklist may be amended from time to time;
 - (iv) in respect of any acquisition where the consideration exceeds EUR [*****] ([*****] euro), legal and financial due diligence reports (including customary reliance letters in favour of the Bank) and a business plan (in the form of the most recent budget adjusted for the expected effects of the acquisition) in respect of the [*****] next following financial years and any other due diligence reports received in connection with the acquisition (if any) are provided to the Bank; and
 - (v) the Borrower provides a Compliance Certificate for the [*****] month financial periods immediately following the acquisition, updated on a pro forma basis as if the acquisition has occurred.

16. Indebtedness

The Borrower shall not, and shall procure that none of its Subsidiaries shall, incur any Indebtedness, save for Indebtedness (“**Permitted Indebtedness**”):

- (a) incurred with the prior written consent of the Bank;
- (b) incurred under this Contract;
- (c) under the existing Building Leasing Agreements and any other existing building lease agreements entered into by the Borrower prior to the date of this Finance Contract in the aggregate liability under such Building Leasing Agreements and any other existing building lease agreements of not more than EUR [*****] at the date of this Finance Contract;
- (d) under any future building lease agreements entered into by the Borrower, to the extent the aggregate liability under such future building lease agreements does not at any time exceed EUR [*****] ([*****] euro) (or its equivalent in another currency or currencies) over the lifetime of this Contract
- (e) under any Finance Leases if the aggregate liability in respect of the equipment leased does not at any time exceed EUR [*****] ([*****] euro over the lifetime of this Contract (or its equivalent in another currency or currencies);
- (f) under Permitted Hedging;
- (g) under any letters of credit provided that such Indebtedness does not, singularly or in aggregate, exceed EUR [*****] ([*****] euro) in any financial year (or its equivalent in another currency or currencies);
- (h) in respect of a Permitted Guarantee;
- (i) owing by one of its Subsidiaries which is an Obligor to another Obligor;
- (j) incurred by way of one or more unsecured revolving credit facilities with an overall maximum amount of EUR [*****] and a maximum term of [*****] years; or
- (k) not permitted by the preceding Sub-Paragraphs and the outstanding amount of which does not exceed (i) EUR [*****] ([*****] euro in any financial year and (ii) EUR [*****] ([*****] euro) over the lifetime of this Contract, (or its equivalent) in aggregate for the Group at any time, provided that (i) any debt cannot be repaid, not even partially, prior to the maturity of the Loan; and (ii) has to be subordinated to the Loan.

17. Guarantees

- (a) The Borrower shall not, and shall procure that none of its Subsidiaries shall, issue or allow to remain outstanding any guarantees or sureties (*Bürgschaften*) in respect of any liability or obligation of any person save for:
 - (i) any guarantee or surety (*Bürgschaft*) under any Guarantee Agreement or with the prior written consent of the Bank; or
 - (ii) guarantees or sureties (*Bürgschaften*) issued by any of its Subsidiaries :
 - (1) under any negotiable instruments in the ordinary course of trade;
 - (2) under or in connection with any performance bond in the ordinary course of trade;
 - (3) under or in connection with any Permitted Indebtedness (except for the DH Convertible Loan Agreement);
 - (4) which is an Obligor to another Obligor;
 - (5) under or in connection with any bank guarantee issued for the benefit of a contractor in connection with construction work to secure such contractor’s claims (*Bauhandwerkersicherung*); or
 - (6) under any guarantee created or subsisting in order to comply with Section 8a of the German Altersteilzeitgesetz (*AltTZG*) or pursuant to Section 7e of the German Social Law Act No. 4 (*Sozialgesetzbuch IV*).

- (b) The Borrower shall procure that, as soon as any of its Subsidiaries becomes a Material Subsidiary (as identified in any accounts delivered to the Bank from time to time pursuant to Paragraph 2 (*Information concerning the Borrower*) of Schedule I (*Information and Visits*), that Subsidiary shall promptly notify the Bank and on the Bank's request enter into a Guarantee Agreement and provide the Bank with the documentary conditions precedent (each in form and substance satisfactory to the Bank) listed in Part B of Schedule F (*Guarantor Conditions Precedent*) within [*****] Business Days following the date on which such Subsidiary qualifies as a Material Subsidiary, subject to general statutory limitations, financial assistance, capital maintenance, corporate benefit, fraudulent preference, "thin capitalisation" rules, retention of title claims and similar principles may limit the ability of a Guarantor to provide a guarantee or security or may require that the guarantee be limited by an amount or otherwise **provided that** the Borrower and each of its Subsidiaries will ensure to overcome such obstacles and, if applicable, to assist in demonstrating that adequate corporate benefit accrues to each Guarantor.

18. Hedging

The Borrower shall not, and shall procure that none of its Subsidiaries shall, enter into any derivative transaction other than Permitted Hedging, where "**Permitted Hedging**" means:

- (a) any derivative transaction by one of its Subsidiaries to hedge actual or projected exposure arising in the ordinary course of trading and not for speculative purposes; and
- (b) any derivative instrument of one of its Subsidiaries which is accounted for on a hedge accounting basis but is not entered into for speculative purposes.

19. Restrictions on distributions

The Borrower shall not, and shall procure that none of its Subsidiaries shall, declare or distribute dividends, or return or purchase shares, save for:

- (a) with the prior written consent of the Bank;
- (b) payments to a Group Company as a result of a solvent liquidation or reorganisation of a Group Company which is not an Obligor;
- (c) any dividend payments made by any Subsidiary; and
- (d) any dividend payments made by an Obligor to another Obligor.

20. Restrictions on loans

The Borrower shall not, and shall ensure that none of its Subsidiaries will, be a creditor in respect of any Indebtedness, save for:

- (a) with the prior written consent of the Bank;
- (b) any trade credit extended by it or any of its Subsidiaries to its customers on normal commercial terms and in the ordinary course of its trading activities;
- (c) any loan made by one of its Subsidiaries (other than an Obligor) to another Subsidiary (other than an Obligor);
- (d) a loan made by one Obligor to another Obligor; or
- (e) any other Indebtedness or loan advanced to or made available by any member of the Group with the prior written consent of the Bank.

21. Restrictions on intercompany loans

The Borrower shall not, and shall procure that none of its Subsidiaries shall, make any payment in respect of any intercompany loan, save for:

- (a) with the prior written consent of the Bank;
- (b) where the lender of the intercompany loan is the Borrower or an Obligor; or
- (c) the payments to a Group Company as a result of a solvent liquidation or reorganisation of a Group Company which is not an Obligor.

22. Intellectual Property Rights

The Borrower shall, and shall procure that none of its Subsidiaries shall, (i) obtain, safeguard and maintain its rights with respect to the Intellectual Property Rights required for the implementation of the Investment in accordance with this Contract, including complying with all material contractual provisions and that the implementation of the Investment in accordance with this Contract will not result in the infringement of the rights of any person with regard to the Intellectual Property Rights and (ii) ensure that any Intellectual Property Rights required for the implementation of the Investment will be owned by or licensed to the Borrower, and where such Intellectual Property Rights which are owned by a Group Company are capable of registration, are registered to such party.

23. Maintenance of Status

The Borrower shall, and shall procure that each of its Subsidiaries shall, remain duly incorporated and validly existing as a corporate entity with limited liability under the jurisdiction in which it is incorporated and that it will have no centre of main interests, permanent establishment or place of business outside the jurisdiction in which it is incorporated, and that it will continue to have the power to carry on its business as it is now being conducted and continue to own its property and other assets.

24. Negative pledge

- (a) The Borrower shall not (and shall procure that none of its Subsidiaries shall) create or permit to subsist any Security over any of its assets.
- (b) For the purposes of this Paragraph 24 (*Negative pledge*), the term Security shall also include any arrangement or transaction on assets or receivables or money (such as the sale, transfer or other disposal of assets on terms whereby they are or may be leased to or re-acquired by the Borrower or any of its Subsidiaries, the sale, transfer or other disposal of any receivables on recourse terms or any arrangement under which money or the benefit of a bank account or other account may be applied or set off or any preferential arrangement having a similar effect) in circumstances where the arrangement or transaction is entered into primarily as a method of raising credit or of financing the acquisition of an asset.
- (c) Sub-Paragraph (a) above does not apply to any Security, listed below ("**Permitted Security**"):
 - (i) any netting or set-off arrangement entered into by any Group Company in the ordinary course of its banking arrangements for the purpose of netting debit and credit balances and any Security arising under general business;
 - (ii) conditions (*Allgemeine Geschäftsbedingungen*) of banks or financial institutions;
 - (iii) any payment or close out netting or set-off arrangement pursuant to any Permitted Hedging, but excluding any Security under a credit support arrangement in relation to a hedging transaction;
 - (iv) any Security arising by operation of law and in the ordinary course of trading;
 - (v) any Security over or affecting any asset acquired by Group Company after the date of this Contract if:

- (1) the Security was not created in contemplation of the acquisition of that asset by a Group Company;
 - (2) the principal amount secured has not been increased in contemplation of or since the acquisition of that asset by a Group Company; and
 - (3) the Security is removed or discharged within [*****] months of the date of acquisition of such asset;
- (vi) any Security over or affecting any asset of any company which becomes a Group Company after the date of this Contract, where the Security is created prior to the date on which that company becomes a Group Company, if:
- (1) the Security was not created in contemplation of the acquisition of that company;
 - (2) the principal amount secured has not increased in contemplation of or since the acquisition of that company; and
 - (3) the Security is removed or discharged within [*****] of that company becoming a Group Company;
- (vii) any Security entered into pursuant to this Contract;
- (viii) any Security provided with the prior written consent of the Bank;
- (ix) any Security arising under any retention of title (including extended retention of title (*verlängerter Eigentumsvorbehalt*)), hire purchase or conditional sale arrangement or arrangements having similar effect in respect of goods supplied to a Group Company in the ordinary course of trading and on the supplier's standard or usual terms and not arising as a result of any default or omission by any Group Company;
- (x) in respect of the Property to the extent restrictions on further charges are prohibited by Section 1136 BGB;
- (xi) in respect of the Property interests, rights, easements or other matter whatsoever evidenced in section II of the land register (*Grundbuch*) as reflected in the copy of the land register excerpt (*Grundbuchauszug*) provided to the Bank;
- (xii) any Security created or subsisting in order to comply with Section 8a of the German Altersteilzeitgesetz (*AltTZG*) or pursuant to Section 7e of the German Social Law Act No. 4 (*Sozialgesetzbuch IV*); or
- (xiii) any contractor's lien arising by operation of law (*Werkunternehmerpfandrecht*) in connection with repairs and maintenance work and any landlord's pledge (*Vermieterpfandrecht*) arising by operation of law under a lease in favour of the relevant third party landlord.

25. Other Undertakings

The Borrower shall take note of the Bank's group statement on tax fraud, tax evasion, tax avoidance, aggressive tax planning, money laundering and financing of terrorism (as published on the Bank's website and as may be amended from time to time).

26. Data Protection

Before disclosing any personal data (other than mere contact information relating to the Borrower's personnel involved in the management of this Contract) to the Bank in connection with this Contract, the Borrower shall ensure that each data subject of those personal data:

- (a) has been informed of the disclosure (including the categories of personal data to be disclosed); and

- (b) has the information in (or has been provided with an appropriate link to) the Bank's privacy statement in relation to its lending and investment activities set out at the relevant time at <https://www.eib.org/en/privacy/lending> (or such other address as the Bank may notify to the Borrower in writing from time to time).

27. European Union Distributions and Sales

Subject to receipt of approval to commercialise the SARS-CoV-2 Vaccine from the European Medicines Agency, the Borrower shall use best commercial efforts to ensure that a reasonable and equitable amount of the future distribution of the SARS-CoV-2 Vaccine as well as other vaccines and products to be manufactured in the GMP IV occurs within the European Union.

28. Sanctions

The Borrower shall ensure that all amounts borrowed by it under this Contract are not made available to, or for the benefit of, persons or entities designated by restrictive measures adopted pursuant to Article 215 of the Treaty on the Functioning of the European Union insofar as the giving of and compliance with such undertaking does not and will not result in a violation of or conflict with or liability under section 7 of the German Foreign Trade Regulation (*Außenwirtschaftsverordnung, AWV*) (in conjunction with sections 4, 19 paragraph 3 no. 1a) of the German Foreign Trade Act (*Außenwirtschaftsgesetz, AWG*) and section 81 paragraph 1 no. 1 AWV) where the Borrower need not comply but only to the extent of the breach.

29. Clauses by inclusion

If the Borrower or any of its Subsidiaries concludes with any other secured and unsubordinated creditor a financing agreement that includes a loss-of-rating clause or a covenant or other provision regarding its financial ratios, if applicable, that is not provided for in this Contract or is more favourable to the relevant creditor than any equivalent provision of this Contract is to the Bank, the Borrower shall promptly inform the Bank and shall provide a copy of the more favourable provision to the Bank. The Bank may request that the Borrower promptly executes an agreement to amend this Contract so as to provide for an equivalent provision in favour of the Bank.

Information and Visits**1. Information concerning the Investment**

- (a) The Borrower shall deliver to the Bank:
- (i) the information in content and in form, and at the times, specified in Part A.2 (*Information Duties*) of Schedule A (*Investment Specification and Reporting*) or otherwise as agreed from time to time by the parties to this Contract;
 - (ii) any such information or further document concerning the Investment as the Bank may require to comply with its obligations under the Horizon 2020 Legal Basis; and
 - (iii) any such information or further document concerning the financing, procurement, implementation, operation and environmental matters of or for the Investment as the Bank may reasonably require within a reasonable time;
- provided always that** if such information or document is not delivered to the Bank on time, and the Borrower does not rectify the omission within a reasonable time set by the Bank in writing, the Bank may remedy the deficiency, to the extent feasible, by employing its own staff or a consultant or any other third party, at the Borrower's expense and the Borrower shall provide such persons with all assistance necessary for the purpose.
- (b) The Borrower shall submit for the approval of the Bank without delay any material changes to the Investment, also taking into account the disclosures made to the Bank in connection with the Investment prior to the signing of this Contract, in respect of, inter alia, the total cost, plans, timetable or to the expenditure programme or financing plan for the Investment.
- (c) The Borrower shall promptly inform the Bank of:
- (i) any action initiated or any objection raised by any third party or any genuine complaint received by the Borrower or any Environmental Claim that is to its knowledge commenced, pending or threatened against it with regard to environmental or other matters affecting the Investment; and
 - (ii) any fact or event known to the Borrower, which may substantially prejudice or affect the Borrower's ability to execute the Investment;
 - (iii) a genuine allegation, complaint or information with regard to Criminal Offences related to the Loan and/or the Investment;
 - (iv) any non-compliance by it with any applicable Environmental Law; and
 - (v) any suspension, revocation or modification of any Environmental Approval, and set out the action to be taken with respect to such matters;
- (d) If the total cost of the Investment exceeds the estimated figure set out in Recital (A), the Borrower shall notify the Bank without delay and shall inform the Bank of its plans to fund the increased costs.
- (e) The Borrower shall, and shall procure that each of its Subsidiaries shall, promptly inform the Bank if at any time it becomes aware of the illicit origin (including products of money laundering or linked to the financing of terrorism) of any funds invested in the Investment by the Borrower or another Group Company.
- (f) The Borrower shall provide to the Bank, if so requested:
- (i) a certificate of its insurers showing that all assets required in order to carry out the Investment are insured with reputable underwriters or insurance companies against those risks and to the extent as is usual for companies carrying on the same or substantially similar business; and

- (ii) annually, a list of policies in force covering any aspect of the Investment, together with confirmation of payment of the current premiums.

2. Information concerning the Borrower

(a) The Borrower shall deliver to the Bank:

- (i) as soon as they become available but in any event within [*****] days after the end of each of its financial years its and CureVac AG's audited consolidated and unconsolidated annual report, balance sheet, cash flow statement, profit and loss account and auditors report for that financial year together with a Compliance Certificate signed by [*****] directors (*Geschäftsführer*);
- (ii) as soon as they become available but in any event within [*****] days after the end of each of the relevant accounting periods its interim consolidated and unconsolidated quarterly report, balance sheet, profit and loss account and cash flow statement for each of the first three quarters of each of its financial years together with a Compliance Certificate signed by [*****] (*Geschäftsführer*);
- (iii) as soon as they become available but in any event within [*****] days after the end of each relevant period its liquidity forecasts for the next twelve months on a rolling basis, satisfactory to the Bank;
- (iv) such further information, evidence or document concerning its general financial situation or such certificates of compliance with the undertakings of Article 7 (*Borrower undertakings and representations*) as the Bank may deem necessary or may reasonably require to be provided within a reasonable time;
- (v) any such further information, evidence or document concerning the compliance with the due diligence requirements of the Bank, including, but not limited to "know your customer" (KYC) or similar identification procedures, when requested and within a reasonable time;
- (vi) such further information, evidence or document concerning the factual information or documents provided to the Bank for the purposes of this Contract, as the Bank may deem necessary or may reasonably require to be provided within a reasonable time; and
- (vii) and any other information reasonably requested by the Bank in order to determine/calculate the Remuneration Payments.

(b) The Borrower shall inform the Bank immediately of:

- (i) any Default or Event of Default having occurred or being threatened or anticipated;
- (ii) to the extent permitted by law, any material litigation, arbitration, administrative proceedings or investigation carried out by a court, administration or similar public authority, which, to the best of its knowledge and belief is current, threatened or pending:
 - (1) against the Borrower or its controlling entities or members of the Borrower's management bodies in connection with Criminal Offences related to the Loan or the Investment; or
 - (2) which might if adversely determined result in a Material Adverse Change;
- (iii) any measure taken by the Borrower pursuant to Paragraph 6 (*Integrity*) of Schedule H (*General Undertakings*);
- (iv) any Change in the Beneficial Ownership of the Borrower; and
- (v) any Voluntary Non EIB Prepayment that has occurred or is likely to occur.

3. Visits by the Bank

- (a) The Borrower shall allow persons designated by the Bank, as well as persons designated by other institutions or bodies of the European Union when so required by the relevant mandatory provisions of European Union law or pursuant to the Horizon 2020 Legal Basis, other competent EU institutions including the European Court of Auditors, the Commission, the European Anti-Fraud Office, the European Public Prosecutor's Office as well as persons designated by the foregoing;
 - (i) to visit the Property, sites, installations and works comprising the Investment;
 - (ii) to interview representatives of the Borrower and each of its Subsidiaries that is an Obligor, and not obstruct contacts with any other person involved in or affected by the Investment; and
 - (iii) to conduct such investigations, inspections, on the spot audits and checks as they may wish and review the books and records of the Borrower and each of its Subsidiaries that is an Obligor in relation to the execution of the Investment and to be able to take copies of related documents to the extent not prohibited by the law.
- (b) The Borrower shall, and shall ensure that each of its Subsidiaries which is an Obligor shall, provide the Bank, or ensure that the Bank is provided, with all necessary assistance for the purposes described in this Paragraph 3 (*Visits by the Bank*).
- (c) In the case of a genuine allegation, complaint or information with regard to Criminal Offences related to the Loan and/or the Investment, the Borrower shall consult with the Bank in good faith regarding appropriate actions. In particular, if it is proven that a third party committed Criminal Offences in connection with the Loan and/or the Investment with the result that the Loan or the financing under the Horizon 2020 Framework EU Programme were misapplied, the Bank may, without prejudice to the other provisions of this Contract, inform the Borrower if, in its view, the Borrower should take appropriate recovery measures against such third party. In any such case, the Borrower shall in good faith consider the Bank's views and keep the Bank informed.

4. Disclosure and publication

- (a) The Borrower acknowledges and agrees that:
 - (i) the Bank may be obliged to communicate information relating to any Obligor and the Investment to any competent institution or body of the European Union in accordance with the relevant mandatory provisions of European Union law or pursuant to the Horizon 2020 Legal Basis; and
 - (ii) the Bank may publish in its website or produce press releases containing information related to the financing provided pursuant to this Contract, including the name, address and country of establishment of the Borrower the purpose of the financing, and the type and amount of financial support received under this Contract.
- (b) The Borrower agrees to cooperate with the Bank to ensure that any press releases or publications made by the Borrower regarding the financing and the Investment include an appropriate acknowledgement of the financial support provided by the Bank with the backing of the European Union through the Horizon 2020 Framework EU Programme.
- (c) If requested by the Bank, the Borrower undertakes to refer to this financing and other Bank financings in its public communications, if appropriate, during the availability period, and in connection with any drawdowns, and communications on major corporate events.

Existing Indebtedness

The DH Convertible Loan Agreement

Existing Security

1. Deposits (*Mietkautionen*) rented under the Building Leasing Agreements.
2. Building cost subsidy (*Baukostenzuschuss*) provided to the lessor(s) under Building Leasing Agreements

REDACTED

Certain identified information, indicated by [***], has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.**

Contract number (FI No): [*****]

Serapis No: [*****]

CUREVAC (IDFF)

Guarantee Agreement

between the

European Investment Bank

and

CureVac AG

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THIS GUARANTEE AGREEMENT IS MADE ON 27 JUNE 2020 BETWEEN:

The European Investment Bank having its seat at 100 blvd Konrad Adenauer, Luxembourg, L-2950 Luxembourg, represented by Tero PIETILA, Head of Division and Ayse Nil ADA, Legal Counsel

(the “**Bank**”)

and

CureVac AG a stock corporation (*Aktiengesellschaft*) incorporated in Germany, having its office at Friedrich-Miescher-Str. 15, 72076 Tübingen, Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Stuttgart under HRB 754041 represented by Dr. Franz-Werner Haas and Pierre Kemula

(the “**Guarantor**”)

WHEREAS:

- (A) Pursuant to a finance contract dated as of 27 June 2020 and entered into between the Bank and CureVac Real Estate GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated in Germany, having its office at Friedrich-Miescher-Str. 15, 72076 Tübingen, Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Stuttgart under HRB 757523 (the “**Borrower**”), the Bank has agreed to grant in favour of the Borrower a credit in the amount of EUR 75,000,000 (seventy five million euro) (the “**Finance Contract**”).
- (B) As a condition precedent to any disbursement under the Finance Contract, the Borrower has undertaken that the Guarantor shall, and the Guarantor has agreed to, grant a guarantee (*Garantie*) in favour of the Bank pursuant to the terms of this guarantee agreement (the “**Guarantee Agreement**”).
- (C) Each Guarantor declares that the entry into, execution and performance of its obligations under this Guarantee Agreement are in its best corporate interest.
- (D) The parties to this Guarantee Agreement expressly agree that the terms of this Guarantee Agreement shall survive, stay in play and are under no circumstances negatively affected by the intended CureVac IPO and any corporate measures or restructurings in connection with or in preparation of such CureVac IPO. The parties to this Guarantee Agreement will do any acts and will enter into any documents (including, without limitation, new guarantee agreements or similar arrangements) to achieve the aforementioned agreement.
- (E) The entry into, execution and performance by the Guarantor of its obligations under this Guarantee Agreement have been duly authorised and the signatories of the Guarantor are duly entitled and authorised to execute this Guarantee Agreement on its behalf.
- (F) The parties to this Guarantee Agreement expressly agree that any reference in this Guarantee Agreement to the Finance Contract shall under no circumstances be construed as affecting the independent, unconditional and irrevocable nature of the guarantee (*Garantie*) granted pursuant to this Guarantee Agreement.

NOW THEREFORE it is hereby agreed as follows:

It is hereby agreed as follows:

ARTICLE 1

Interpretation and definitions

1.01 Interpretation

In this Guarantee Agreement, unless a contrary indication appears:

- (a) “Guarantor”, the “Bank” or the “Borrower” shall be construed as to include its and any subsequent successors in title, permitted assigns and permitted transferees;
- (b) references to Articles, Recitals, Schedules and (Sub-)Paragraphs are, save if explicitly stipulated otherwise, references respectively to articles of, and recitals, schedules and (sub-)paragraphs of schedules to, this Guarantee Agreement. All Recitals and Schedules form part of this Guarantee Agreement;
- (c) references to “law” or “laws” mean (i) any applicable law and any applicable treaty, constitution, statute, legislation, decree, normative act, rule, regulation, judgement, order, writ, injunction, determination, award or other legislative or administrative measure or judicial or arbitral decision in any jurisdiction which is binding or applicable case law, and (ii) EU Law;
- (d) references to applicable law, applicable laws or applicable jurisdiction means (i) a law or jurisdiction applicable to the Guarantor, its rights and/or obligations (in each case arising out of or in connection with the Finance Documents), its capacity and/or assets, and/or, as applicable, (ii) a law or jurisdiction (including in each case the Bank’s Statute) applicable to the Bank, its rights, obligations, capacity and/or assets;
- (e) references to a provision of law are references to that provision as amended or re-enacted;
- (f) references to this Guarantee Agreement and any other Finance Document or other agreement or instrument are references to this Guarantee Agreement or that Finance Document or other agreement or instrument as amended, novated, supplemented, extended or restated;
- (g) words and expressions in plural shall include singular and vice versa;
- (h) “promptly” is to be construed as *unverzüglich* (without undue delay) within the meaning of Section 121 para. 1 sentence 1 of the BGB;
- (i) a “person” includes any person, firm, company, corporation, government, state or agency of a state or any association, trust or partnership (whether having separate legal personality or not); and
- (j) a Default (other than an Event of Default) is “continuing” if it has not been remedied or waived and an Event of Default is “continuing” if it has not been waived.

A term used in any notice given under or in connection with this Guarantee Agreement has the same meaning as ascribed to it in this Guarantee Agreement. This Guarantee Agreement is made in the English language. For the avoidance of doubt, the English language version of this Guarantee Agreement shall prevail over any translation of this Guarantee Agreement. However, where a German translation of a word or phrase appears in the text of this Guarantee Agreement, the German translation of such word or phrase shall prevail.

1.02 **Definitions**

A reference to a term defined in the Finance Contract has the same meaning in this Guarantee Agreement, unless otherwise defined herein. In this Guarantee Agreement:

“**Bank’s Account**” has the meaning given to such term in Article 3.02(c) (*Demands and payments*).

“**BGB**” means the German Civil Code (*Bürgerliches Gesetzbuch*).

“**Demand**” has the meaning given to such term in Article 3.02 (*Demands and payments*).

“**EUR**” or “**euro**” means the lawful currency of the Member States of the European Union which adopt or have adopted it as their currency in accordance with the relevant provisions of the Treaty on European Union and the Treaty on the Functioning of the European Union or their succeeding treaties.

“**Fee Letters**” means the Luxembourg law governed letter from the Bank to the Borrower dated 18 March 2020 and dated on or about 27 June 2020.

“**Finance Documents**” means this Guarantee Agreement, the Finance Contract, the Security Documents, the Fee Letters and any other document designated as a “Finance Document” by the Borrower and the Bank.

“**GAAP**” means generally accepted accounting principles in (*Grundsätze ordnungsgemäßer Buchführung*) in Germany, including IFRS.

“**Guarantee**” means the guarantee and indemnity granted pursuant to Article 3.01 (*Guarantee (Garantie) and Indemnity (Ausfallhaftung)*).

“**InsO**” means the German Insolvency Code (*Insolvenzordnung*).

“**Land Charge**” means the first ranking land charge without certificate (*Buchgrundschuld*) in the amount of EUR 75,000,000 (plus [*****]% interest p.a. and [*****]% one-time supplementary payment) created under the Land Charge Creation Deed by which the Borrower will encumber its Property and certain of its assets falling within the statutory scope of the Land Charge (*Grundschuldhaftungsverband*) in favour of the Bank.

“**Land Charge Creation Deed**” means any document by means of which the Land Charge is created and which includes, *inter alia*, an abstract acknowledgement of debt of the Borrower in the amount of the Land Charge (in each case subject to the submission to the immediate enforcement (*sofortige Zwangsvollstreckungsunterwerfung*) *in personam* and *in rem* for the full Land Charge amount), the Borrower’s approval for registration (*Eintragungsbewilligung*) of the Land Charge in the land register, regardless of whether such document will be officially certified (*öffentlich beglaubigt*) or notarially recorded (*notariell beurkundet*).

“**Notification**” has the meaning given to such term in Article 3.02 (*Demands and payments*).

“**Payment Period**” has the meaning ascribed to such term in Article 3.02(e) (*Demands and payments*).

“**Secured Obligations**” has the meaning given to such term in Article 3.01(a) (*Guarantee (Garantie) and Indemnity (Ausfallhaftung)*).

“**Security**” means any mortgage, land charge (*Grundschild*), security purpose agreement (*Sicherungszweckvereinbarung*), pledge, lien, charge, assignment, security transfer (*Sicherungsübereignung*), retention of title arrangements, hypothecation, or other security interest securing any obligation of any person or any other agreement or arrangement having a similar effect.

“**Security Documents**” means each Guarantee Agreement (including, for the avoidance of doubt, this Guarantee Agreement), the Land Charge Creation Deed, the Security Purpose Agreement and any other document entered into by any person creating or expressed to create any Security over all or any part of its assets in respect of the obligations of any of the Obligor under any of the Finance Documents.

“**Security Purpose Agreement**” means the security purpose agreement (*Sicherungszweckvereinbarung*) to be entered into by the Borrower as security grantor and the Bank as beneficiary in relation to the Land Charge.

“**Tax**” means any tax, levy, impost, duty or other charge or withholding of a similar nature (including any penalty or interest payable in connection with any failure to pay or any delay in paying any of the same).

“**ZPO**” means the German Code of Civil Procedure (*Zivilprozessordnung*).

ARTICLE 2

Finance Documents

The Guarantor hereby confirms that it has received a copy of the Finance Documents and that it is aware of the contents of the Finance Documents and the transactions contemplated thereby. The Guarantor further confirms that, to the extent the Finance Documents are in the English language, it is in command of the English language or has obtained a translation thereof, and to the extent necessary, has made itself familiar with the contents of the Finance Documents and the transactions contemplated thereby.

ARTICLE 3

Guarantee

3.01 Guarantee (*Garantie*) and Indemnity (*Ausfallhaftung*)

The Guarantor irrevocably and unconditionally:

- (a) guarantees (*garantiert*) by way of an independent payment obligation (*selbständiges Zahlungsversprechen*) to the Bank to pay to the Bank any amount of principal, interest, Renumeration Payments, costs, expenses or other amount under or in connection with the Finance Documents that has not been fully and irrevocably paid by the Borrower or any other Guarantor, in each case including, for the avoidance of doubt, any obligation arising out of damages (*Schadenersatz*), unjust enrichment (*ungerechtfertigte Bereicherung*), tort (*unerlaubte Handlung*) or any claims arising from an insolvency administrator's discretion to perform obligations in agreements according to Section 103 InsO (the "**Secured Obligations**"); and
- (b) undertakes vis-à-vis the Bank to indemnify (*schadlos halten*) the Bank against any cost, loss or liability suffered by the Bank if any obligation of the Borrower under or in connection with any Finance Document or any obligation guaranteed by it is or becomes unenforceable, invalid or illegal. The amount of the cost, loss or liability shall be equal to the amount which the Bank would otherwise have been entitled to recover (*Ersatz des positiven Interesses*), unless such will be caused by gross negligence or wilful misconduct of the Bank; in this event the principles of contributory negligence (*Mitverschulden*) will apply.

For the avoidance of doubt this Guarantee does not constitute a surety (*Bürgschaft*) or a guarantee upon first demand (*Garantie auf erstes Anfordern*) and, in particular, receipt of such written demand shall not preclude any rights and/or defences the Guarantor may have with respect to any payment requested by the Bank under this Guarantee.

3.02 Demands and payments

Any demand made by the Bank to the Guarantor under this Guarantee Agreement (each, a “**Demand**”) shall be made by way of a written notification addressed by the Bank to the Guarantor, sent in accordance with the provisions set forth in Article 10.01 (*Form of notice*) below and having the following content (each a “**Notification**”):

- (a) specifying that the Bank is making a Demand under this Guarantee Agreement;
- (b) specifying the amount due and payable by the Guarantor and that such amount is an amount of principal, interest, Renumeration Payments, costs, expenses or other amount under or in connection with the Finance Documents that has not been fully and irrevocably paid by the Borrower or any other Guarantor as well as the currency of payment of such sums; and
- (c) providing details of the relevant bank account into which payment should be made (the “**Bank’s Account**”) together with relevant instructions as to how payment should be made (if any),

it being understood that:

- (d) the Bank shall be under no obligation to provide the Guarantor with any additional document nor to support its claim with any other justification or evidence; and
- (e) the payment obligation of the Guarantor under this Guarantee Agreement is not subject to the accuracy or the merit of any statement, declaration or information contained in any Notification.

The Guarantor shall make the payment requested in the Notification within [*****] Business Days as from the date of receipt (included) of the relevant Notification (the “**Payment Period**”) and in the currency as requested within the Notification.

The Bank is entitled to request the payment of any amount in one or several instalments.

3.03 Independent payment obligation

This Guarantee:

- (a) is independent and separate from the other obligations of the Borrower and is a continuing guarantee and indemnity which will extend to the ultimate balance of sums payable by the Borrower under the Finance Documents, regardless of any intermediate payment or discharge in whole or in part; and
- (b) shall extend to any additional obligations of the Borrower resulting from any amendment, novation, supplement, extension, restatement or replacement of any Finance Document, including without limitation any extension of or increase in any Loan or the addition of a new loan or tranche under the Finance Contract.

3.04 **No defence**

- (a) The obligations of the Guarantor under this Guarantee Agreement will not be affected by an act, omission, matter or thing which relates to the principal obligation (or purported obligation) of the Borrower or any other Guarantor and which would reduce, release or prejudice any of its obligations under this Guarantee Agreement, including any personal defences of the Borrower (*Einreden des Hauptschuldners*) or any right of revocation (*Anfechtung*) or set-off (*Aufrechnung*) of the Borrower. In particular, the Guarantor by its execution of this Guarantee Agreement:
- (i) consents (*willigt ein*), as required pursuant or analogue to Section 418 sub-section 1 sentence 3 BGB, to any assumption of debt (*Schuldübernahme*) or assignment and transfer by assumption of contract (*Vertragsübernahme*) which relates to any such principal obligation (or purported obligation); and
 - (ii) waives (*verzichtet auf*) (A) any defences (*Einreden*) to which a Borrower in its respective capacity as principal debtor (*Hauptschuldner*) of any such principal obligation (or purported obligation) may be entitled and which may be asserted by the Guarantor pursuant or analogue to Section 768 sub-section 1 BGB as well as (B) any defences of voidability (*Anfechtbarkeit*) and set-off (*Aufrechenbarkeit*) pursuant or analogue to Section 770 sub-section 1 BGB or, respectively, section 770 sub-section 2 BGB.
- (b) The obligations of the Guarantor under this Guarantee Agreement are independent from any other security or guarantee which may have been or will be given to the Bank. In particular, the obligations of the Guarantor under this Guarantee Agreement will not be affected by any of the following:
- (i) the release of, or any time (*Stundung*), waiver or consent granted to, the Borrower or any other Guarantor from or in respect of its obligations under or in connection with any Finance Document,
 - (ii) the taking, variation, compromise, exchange, renewal or release of, or refusal or neglect to perfect, take up or enforce, any rights against, or Security over assets of, the Borrower or any other Guarantor or any other person or any failure to realise the full value of any Security,
 - (iii) any incapacity or lack of power, authority or legal personality of or dissolution or a deterioration of the financial condition of the Borrower or any other Guarantor, or
 - (iv) any unenforceability, illegality or invalidity of any obligation of the Borrower or any other Guarantor under the Finance Documents.
- (c) For the avoidance of doubt nothing in this Article 3.04 (*Excluded defences*) shall preclude:
- (i) any defences that the Guarantor (in its capacity as Guarantor only) may have against the Bank that the Guarantee does not constitute its legal, valid, binding or enforceable obligations, in particular respective limitations of enforceability based on corporate or insolvency laws which may be applicable to the Guarantor in its jurisdiction; and
 - (ii) asserting and invoking any objections or defences which the Guarantor itself may have against the Bank under this Guarantee Agreement.

3.05 Immediate recourse

The Bank will not be required to proceed against or enforce any other rights or Security or claim payment from any person before claiming from the Guarantor under this Guarantee. This applies irrespective of any law or provision of a Finance Document to the contrary.

3.06 Appropriations

Until all amounts which may be or become payable by the Borrower and the Guarantor under or in connection with the Finance Documents have been unconditionally and irrevocably paid in full, the Bank may:

- (a) refrain from applying or enforcing any other moneys, Security or rights held or received by the Bank in respect of those amounts, or apply and enforce the same in such manner and order as it sees fit (whether against those amounts or otherwise) and the Guarantor shall not be entitled to the benefit of the same; and
- (b) hold in an account any moneys received from the Guarantor or on account of the Guarantor's liability under this Guarantee until further notice by the Guarantor in which case the moneys shall be applied towards the discharge of the Secured Obligations.

3.07 Deferral of Guarantor's rights

- (a) Until all amounts which may be or become payable by the Borrower and the Guarantor under or in connection with the Finance Documents have been irrevocably paid in full and unless the Bank otherwise directs, the Guarantor will not exercise any rights which it may have by reason of performance by it of its obligations under the Finance Documents or by reason of any amount being payable, or liability arising, under this Guarantee:
 - (i) to be indemnified by the Borrower or any other Guarantor;
 - (ii) to claim any contribution from any other guarantor of any Borrower's or any Guarantor's obligations under the Finance Documents;
 - (iii) to exercise any right of set-off against the Borrower or any other Guarantor; and/or
 - (iv) to take the benefit (in whole or in part and whether by way of legal subrogation or otherwise) of any rights of the Bank under the Finance Documents or of any other guarantee or Security taken pursuant to, or in connection with, the Finance Documents by the Bank.
- (b) If the Guarantor receives any benefit, payment or distribution in relation to such rights it shall hold that benefit, payment or distribution to the extent necessary to enable all amounts which may be or become payable to the Bank by the Borrower and any other Guarantor under or in connection with the Finance Documents to be repaid in full on trust for the Bank and shall promptly pay or transfer the same to the Bank or as the Bank may direct.

3.08 Additional Security

This Guarantee is in addition to and is not in any way prejudiced by any other guarantee or Security now or subsequently held by the Bank.

ARTICLE 4

Term of the Guarantee

4.01 Term

This Guarantee shall take effect on the date of execution of this Guarantee Agreement and expire on the date on which the Secured Obligations have been unconditionally and irrevocably been paid to the satisfaction of the Bank.

4.02 Reinstatement

If any payment by the Borrower or the Guarantor is avoided or reduced as a result of insolvency or any similar event:

- (a) the liability of the Guarantor shall continue as if the payment, discharge, avoidance or reduction had not occurred; and
- (b) the Bank shall be entitled to recover the value or amount of that security or payment from the (other) Guarantor(s), as if the payment, discharge, avoidance or reduction had not occurred.
- (c) Guarantor shall pay or reimburse the Bank for all expenses incurred by the Bank in the defence of any claim that a payment received by the Bank in respect of all or any part of the obligations under the Finance Documents must be refunded.
- (d) The provisions of this Article 4.02 shall survive the termination of this Guarantee Agreement and any satisfaction and discharge of Borrower by virtue of any payment, court order, or law

ARTICLE 5

Representations and Warranties

5.01 Representations and Warranties of the Guarantor

The Guarantor hereby represents and warrants to the Bank on the date of this Guarantee Agreement in respect of itself and, where applicable, the other Obligors:

- (a) **Authorisations and Binding Obligations**
 - (i) Each Obligor is duly incorporated and validly existing as a corporation or company with limited liability under the laws of its jurisdiction of incorporation. No Obligor's shares are publicly traded.

- (ii) Its place of incorporation or establishment is not (a) a jurisdiction classified by any Lead Organisation as being weakly regulated and/or weakly supervised and/or non-transparent and/or uncooperative or any equivalent classification used by any Lead Organisation, in connection with activities such as money laundering, financing of terrorism, tax fraud and tax evasion or harmful tax practices, and/or (b) a jurisdiction that is blacklisted by any Lead Organisation in connection with such activities.¹
- (iii) Each Obligor has the power to carry on its business as it is now being conducted and to own its property and other assets, and to execute, deliver and perform its obligations under the Finance Documents.
- (iv) Each Obligor has obtained all necessary Authorisations in connection with the execution, delivery and performance of the Finance Documents and in order to lawfully comply with its obligations thereunder, and in respect of the Investment, and all such Authorisations are in full force and effect and admissible in evidence.
- (v) The execution and delivery of, the performance of each Obligor's obligations under and compliance with the provisions of the Finance Documents do not and will not contravene or conflict with:
 - (A) any applicable law, statute, rule or regulation, or any judgement, decree or permit to which it is subject;
 - (B) any agreement or other instrument binding upon it which might reasonably be expected to have a material adverse effect on its ability to perform its respective obligations under this Guarantee Agreement; or
 - (C) any provision of its constitutional documents.
- (vi) The execution and delivery of the Guarantee Agreement and the performance and compliance with its respective duties under this Guarantee Agreement do not and will not cause any representations made pursuant to this Article 5.01 to be untrue.
- (vii) The obligations expressed to be assumed by it in this Guarantee Agreement are legal, valid, binding and enforceable obligations.

¹ Relevant jurisdictions may be identified on the basis of lists of Lead Organisations, as such lists are updated, amended or supplemented from time to time, including: jurisdictions with strategic deficiencies in the area of AML-CFT as identified by FATF (<http://www.fatf-gafi.org/countries/#high-risk>); jurisdictions listed "partially compliant", "provisionally partially compliant" or "non-compliant" in the OECD Global Forum progress reports/ Global Forum rating (<http://www.oecd.org/tax/transparency/GFRatings.pdf>; <http://www.oecd.org/tax/transparency/exchange-of-information-on-request/ratings/>); jurisdictions identified in EU delegated regulation 2016/1675 of 14.7.2016 supplementing Directive (EU) 2015/849 as high-risk third countries with strategic deficiencies (<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R1675>); and jurisdictions included in the EU list of non-cooperative jurisdictions for tax purposes (https://ec.europa.eu/taxation_customs/tax-common-eu-list_en).

(b) **No default or other adverse event**

- (i) There has been no Material Adverse Change since [*****]. (*Non-repeating*)
- (ii) No event or circumstance which constitutes an Event of Default has occurred and is continuing.

(c) **No Insolvency**

As at the date of this Guarantee Agreement, no Obligor has taken any action to commence proceedings for, nor have any other steps been taken or legal proceedings commenced or, so far as the Borrower is aware, threatened against any Obligor for its insolvency, winding up or dissolution, or for any Obligor to enter into any arrangement or compositions for the benefit of creditors, or for the appointment of an administrator, receiver, administrative receiver, examiner, trustee or similar officer. (*Non-repeating*)

(d) **No Proceedings**

- (i) No litigation, arbitration, administrative proceedings or investigation is current or to its knowledge is threatened or pending before any court, arbitral body or agency which has resulted or if adversely determined is reasonably likely to result in a Material Adverse Change, nor is there subsisting against it or any of its Subsidiaries any unsatisfied judgement or award. (*Non-repeating*)
- (ii) To the best of its knowledge and belief (having made due and careful enquiry) no material Environmental Claim has been commenced or is threatened against any Obligor.
- (iii) As at the date of this Guarantee Agreement, no Obligor has taken any action to commence proceedings for, nor have any other steps been taken or legal proceedings commenced or, so far as the Borrower is aware, threatened against any Obligor for its insolvency, winding up or dissolution, or for any Obligor to enter into any arrangement or compositions for the benefit of creditors, or for the appointment of an administrator, receiver, administrative receiver, examiner, trustee or similar officer.

(e) **Security**

At the date of this Guarantee Agreement, no Security exists over its assets other than any Permitted Security.

(f) **Ranking**

- (i) Its payment obligations under this Guarantee Agreement rank not less than *pari passu* in right of payment with all other present and future unsecured and unsubordinated obligations under any of its debt instruments except for obligations mandatorily preferred by law applying to companies generally.

- (ii) No financial covenants have been concluded with any other creditor of any Obligor.
- (iii) No Voluntary Non-EIB Prepayment has occurred.

(g) **Anti-Corruption**

- (i) Each Obligor is in compliance with all applicable European Union and national legislation, including any applicable anti-corruption legislation.
- (ii) To the best of its knowledge, no funds invested in the Investment by any Obligor or any other Group Company are of illicit origin, including products of money laundering or linked to the financing of terrorism.
- (iii) No Obligor is engaged in any Criminal Activities and to the best of the Obligor's knowledge no Criminal Activities have occurred in connection with the Investment. *(Non-repeating)*

(h) **Accounting and Tax**

- (i) The latest available consolidated and unconsolidated audited accounts of the Guarantor and the Borrower have been prepared on a basis consistent with previous years and have been approved by its auditors as representing a true and fair view of the results of its operations for that year and accurately disclose or reserve against all the liabilities (actual or contingent) of the Guarantor and the Borrower, as relevant.
- (ii) The Accounting Reference Date of it is 31 December.
- (iii) No Obligor is required to make any deduction for or on account of any Tax from any payment it may make under the Finance Documents, except for withholding tax (*Kapitalertragssteuer*) which have to be deducted pursuant to Sub-Paragraph (j) of Article 4.2 (*Variable Remuneration*) of the Finance Contract. *(Non-repeating)*
- (iv) All Tax returns required to have been filed by each Obligor or on its behalf under any applicable law have been filed when due and contain the information required by applicable law to be contained in them.
- (v) Each Obligor has paid when due all Taxes payable by it under applicable law except to the extent that it is contesting payment in good faith and by appropriate means.
- (vi) With respect to Taxes which have not fallen due or which it is contesting, each Obligor is maintaining reserves adequate for their payment and in accordance, where applicable, with GAAP.
- (vii) Under the laws of the jurisdiction of incorporation of each Obligor, it is not necessary that the Finance Documents be filed, recorded or enrolled with any court or other authority or that any stamp, registration or similar tax be paid on or in relation to the Finance Documents, or the transactions contemplated by the Finance Documents, other than the official certification (*öffentliche Beglaubigung*) of the Land Charge Creation Deed (*Grundschuldbestellungsurkunde*) and payment of related notary fees and the registration of the Land Charge in the land register (*Grundbuch*) and payment of the related registration fees. *(Non-repeating)*

(i) **Information provided**

Any factual information provided by any Group Company for the purposes of entering into this Guarantee Agreement and any related documentation was true and accurate in all material respects as at the date it was provided or as at the date (if any) at which it is stated and continues to be true and accurate in all material respect as at the date of this Guarantee Agreement. *(Non-repeating)*

(j) **No indebtedness**

No Obligor has Indebtedness outstanding other than Permitted Indebtedness. *(Non-repeating)*

(k) **No Immunity**

No Obligor, nor any of its assets, is entitled to immunity from suit, execution, attachment or other legal process.

(l) **Pensions**

The pension schemes for the time being operated by the Obligors (if any) are funded in accordance with their rules and to the extent required by law or otherwise comply with the requirements of any law applicable in the jurisdiction in which the relevant pension scheme is maintained.

(m) **Environment**

The Guarantor is in compliance with Paragraph 5. *(Environment)* of Schedule H *(General Undertakings)* of the Finance Contract, as if all references to the Borrower were to the Guarantor.

(n) **Borrower Information**

The Guarantor has and will continue to have full and complete access to any and all information concerning the transactions contemplated by the Finance Documents or referred to therein, the value of the assets owned or to be acquired by Borrower, Borrower's financial status, and Borrower's ability to pay and perform any obligation under or in connection with any Finance Document. So long as any obligation of Borrower under or in connection with any Finance Document remains unsatisfied or owing to the Bank, Guarantor shall keep itself fully informed as to all aspects of Borrower's financial condition and ability to pay and perform such obligations.

(o) **Other**

In respect of this Guarantee Agreement and the transaction contemplated by, referred to in, provided for or effected by this Guarantee Agreement, it has entered into this Guarantee Agreement (i) in good faith and for the purpose of carrying out its business, (ii) on arms' length commercial terms and (iii) without any intention to defraud or deprive of any legal benefit any other parties (such as third parties and in particular creditors other than the Bank) or to circumvent any applicable mandatory laws or regulations of any jurisdiction.

The representations and warranties set out in this Article 5.01 – other than those Paragraphs which are identified with the words “(Non-repeating)” at the end of the Paragraphs - shall survive the execution of this Guarantee Agreement and shall be repeated on each Disbursement Date Acceptance and each Disbursement Date, by reference to the facts and circumstances then prevailing.

The Guarantor hereby confirms that it has made the representations and warranties contained in this Article with the intention of inducing the Bank to enter into the Finance Contract and accepting this Guarantee as security for the Finance Contract and that the Bank has entered into the Finance Contract and has accepted this Guarantee as security for the Finance Contract on the basis of, and in full reliance on, each of such representations and warranties.

5.02 Undertakings of the Guarantor

The Guarantor acknowledges and agrees that during the subsistence of this Guarantee Agreement:

(a) Authorisations

It shall obtain, comply with the terms of and do all that is necessary to maintain in full force and effect all authorisations, approvals, licences and consents required in or by the laws and regulations of its jurisdiction of incorporation to enable it lawfully to enter into, exercise its rights and perform the obligations expressed to be assumed by it under this Guarantee Agreement and to ensure the legality, validity, enforceability and admissibility in evidence of this Guarantee Agreement in its jurisdiction of incorporation.

(b) No Security

It shall not create or permit to subsist any Security over any of its assets other than:

- (i) any Permitted Security; and
- (ii) any Security created with the prior approval of the Bank.

(c) *Pari passu* with other creditors

The Guarantor shall ensure that its payment obligations under this Guarantee Agreement rank, and will rank not less than *pari passu* in right and priority of payment with all other present and future unsecured and unsubordinated obligations under any of its debt instruments except for obligations mandatorily preferred by law applying to companies generally.

(d) No action

It shall not take any action which would cause any of the representations made in Article 5.01 (*Representations and Warranties of the Guarantor*) above to be untrue at any time during the continuation of this Guarantee Agreement.

(e) **Know your Customer**

The Guarantor shall deliver to the Bank any such information or further document concerning customer due diligence matters of or for the Guarantor as the Bank may reasonably require within a reasonable timeframe.

(f) **Notification duty**

The Guarantor shall notify the Bank of the occurrence of any event which results in or may reasonably be expected to result in any of the representations made in Article 5.01 (*Representations and Warranties of the Guarantor*) above being untrue.

(g) **Completion of Investment**

The Guarantor shall or shall procure that the Investment is carried out by the Borrower in accordance with the Technical Description as may be modified from time to time with the approval of the Bank, and is completed by the final date specified in the Finance Contract.

(h) **Procurement procedure**

The Guarantor shall and shall ensure that the Borrower secures goods and services for the Investment (a) in so far as they apply to it or to the Investment, in accordance with EU Law in general and in particular with the relevant EU Directives, and (b) in so far as EU Directives do not apply, by procurement procedures which, to the satisfaction of the Bank, respect the criteria of economy and efficiency and, in case of public contracts, the principles of transparency, equal treatment and non-discrimination on the basis of nationality.

(i) **Compliance with laws**

The Guarantor shall comply in all respects with all laws and regulations to which it or the Investment is subject.

(j) **Environment**

The Guarantor shall, and shall procure that the Borrower shall:

- (i) implement and operate the Investment in compliance with Environmental Law; and
- (ii) obtain, maintain and comply with requisite Environmental Approvals for the Investment,

and upon becoming aware of any breach of this Paragraph (j) (*Environment*) the Guarantor shall, or shall ensure that the Borrower will:

- (i) promptly notify the Bank;
- (ii) consult with the Bank for up to [*****] Business Days from the date of notification with a view to agreeing the manner in which the breach should be rectified; and
- (iii) remedy the breach within [*****] Business Days of the end of the consultation period.

(k) **Integrity**

The Guarantor shall take, within a reasonable timeframe, appropriate measures in respect of any member of its management bodies who has been convicted by a final and irrevocable court ruling of a Criminal Offence perpetrated in the course of the exercise of his/her professional duties, in order to ensure that such member is excluded from any Guarantor's activity in relation to the Loan or the Investment.

(l) **Disposal of assets**

- (i) Except as provided under Sub-Paragraph (b) below, the Guarantor shall not, and shall procure that no Group Company shall, either in a single transaction or in a series of transactions whether related or not and whether voluntarily or involuntarily dispose of all or any part of any Group Company's business, undertaking or assets (including any shares, real estate or security of any entity or a business or undertaking, or any interest in any of them).
- (ii) Sub-Paragraph (i) above does not apply to any such disposal ("**Permitted Disposal**"):
- (A) made with the prior written consent of the Bank;
 - (B) made on arm's length terms in the ordinary course of business of a Group Company, provided that these are made between Obligor only;
 - (C) made on arm's length terms and at fair market value for cash, which is reinvested in assets of comparable or superior type, value and quality;
 - (D) made on arm's length terms in exchange for other assets (other than shares, businesses and real estate) comparable or superior as to type, value and quality;
 - (E) by one Group Company which is (A) an Obligor to another Obligor, or (B) not an Obligor to another Group Company which is not an Obligor;
 - (F) constituted by a licence of Intellectual Property Rights on arm's length terms in the ordinary course of business of a Group Company;
 - (G) made in relation to non-material assets which have depreciated to less than [*****]% ([*****] per cent.) of their initial value or which are obsolete; or
 - (H) arising as a result of Permitted Security,

provided that the disposal is not of assets forming part of the Investment or shares in subsidiaries holding assets forming part of the Investment, which may not be disposed of unless either (A) the Guarantor consults the Bank in relation to such disposal, and the Bank approves the disposal, or (B) the proceeds of the disposal are applied to repay Loan.

For the purposes of this Paragraph (l) (*Disposal of assets*), "dispose" and "disposal" includes any act effecting sale, transfer, lease or other disposal (*Verfügung*).

(m) **Maintenance of assets**

The Guarantor shall, or shall ensure that the Borrower maintain, repair, overhaul and renew all assets required in relation to the Investment as required to keep such assets in good working order.

(n) **Insurances**

The Guarantor shall, and shall procure that each Group Company shall, maintain insurances on and in relation to its business and assets with reputable underwriters or insurance companies against those risks and to the extent as is usual for companies carrying on the same or substantially similar business.

(o) **Change in business**

The Guarantor shall procure that no substantial change is made to the general nature of its business, the business of the Borrower or the business of the Group as a whole from that carried on at the date of this Agreement.

(p) **Merger**

The Guarantor shall not, and shall procure that that no Group Company shall, enter into any amalgamation, demerger, merger or corporate reconstruction (including the conclusion of any domination and/or profit and loss transfer agreements (*Beherrschungs- und/oder Gewinnabführungsverträge*) or any other enterprise agreements (*Unternehmensverträge*) with the meaning of section 291 AktG) unless:

- (i) with the prior written consent of the Bank; or
- (ii) such amalgamation, demerger, merger or corporate reconstruction does not result in a Material Adverse Change and is on a solvent basis, and provided that:
 - (A) only Group Companies are involved and if a Guarantor is involved, the surviving entity will also be or become a Guarantor;
 - (B) the resulting entity will not be incorporated or located in a country which is in a jurisdiction that is blacklisted by any Lead Organisation in connection with activities such as money laundering, financing of terrorism, tax fraud and tax evasion or harmful tax practices as such blacklist may be amended from time to time; and
 - (C) if the Borrower is involved, (1) the rights and obligations of the Borrower under the Finance Contract will remain with the Borrower, (2) the surviving entity will be the Borrower and the statutory seat of the Borrower would not as a result of such merger be transferred to a different jurisdiction, (3) the merger will not have an effect on the validity, legality or enforceability of the Borrower's obligations under this Contract; and (4) all of the business and assets of the Borrower are retained by it.

(q) **Books and records**

The Guarantor shall, and shall procure that each Group Company shall ensure that it has kept and will continue to keep proper books and records of account, in which full and correct entries shall be made of all financial transactions and its assets and business, including expenditures in connection with the Investment, in accordance with GAAP as in effect from time to time.

(r) **Ownership**

- (i) The Guarantor shall maintain not less than [*****]% ([*****] per cent.) of the issued share capital, directly or indirectly through wholly owned subsidiaries, of the Borrower, unless a prior written consent of the Bank is received by the Guarantor.
- (ii) The Guarantor shall immediately notify the Bank in the event of a new entity becoming a Subsidiary of the Guarantor through any means, including but not limited to acquisition, creation and spin-off.
- (iii) The undertakings in Sub-Paragraphs (i), and (ii) above shall be calculated in accordance with GAAP as applied by the Guarantor on the date of this Agreement and as GAAP is amended from time to time and tested annually.

(s) **Acquisitions**

The Guarantor shall not, and shall procure that no Group Company shall, invest in (including by way of payment into the capital reserve (*Kapitalrücklage*)) or acquire any entity or a business going concern or an undertaking (whether whole or substantially the whole of the assets or business), or any division or operating unit thereof, or any shares or securities of any entity or a business or undertaking (or in each case, any interest in any of them) (or agree to any of the foregoing), save for an acquisition or investment:

- (i) with the prior written consent of the Bank;
- (ii) by a Group Company which is an Obligor of an asset sold, leased, transferred or otherwise disposed of by another Obligor;
- (iii) by a Group Company of all the shares or other ownership interests in any limited liability company or corporation, limited liability partnership or any equivalent company, provided that:
 - (A) such entity has not yet commenced commercial operations;
 - (B) such entity is incorporated in a country that is a member of either or both of the European Union or the Organisation of Economic Co-Operation and Development; and
 - (C) no Event of Default is continuing on the date the relevant acquisition agreement is entered into or would occur as a result of the acquisition; or
- (iv) of shares or other ownership interests in any limited liability company or corporation, limited liability partnership or any equivalent company, the consideration for which does not exceed an aggregate amount of EUR [*****] ([*****] euro) during any financial year, provided that:
 - (A) no Event of Default is continuing on the date the relevant acquisition agreement is entered into or would occur as a result of the acquisition;
 - (B) the acquired entity is engaged in a business similar or complementary to the business carried on by the Group as at the date of this Contract;
 - (C) the acquired entity is not incorporated or located in a jurisdiction that is blacklisted by any Lead Organisation in connection with activities such as money laundering, financing of terrorism, tax fraud and tax evasion or harmful tax practices as such blacklist may be amended from time to time;

- (D) in respect of any acquisition where the consideration exceeds EUR [*****] ([*****] euro), legal and financial due diligence reports (including customary reliance letters in favour of the Bank) and a business plan (in the form of the most recent budget adjusted for the expected effects of the acquisition) in respect of the 3 (three) next following financial years and any other due diligence reports received in connection with the acquisition (if any) are provided to the Bank; and
- (E) the Borrower provides a Compliance Certificate for the [*****] month financial periods immediately following the acquisition, updated on a pro forma basis as if the acquisition has occurred.

(t) **Indebtedness**

The Guarantor shall not, and shall procure that no other Group Company shall, incur any Indebtedness, save for any Permitted Indebtedness.

(u) **Guarantees**

- (i) The Guarantor shall not, and shall procure that no other Group Company shall, issue or allow to remain outstanding any guarantees or sureties (*Bürgschaften*) in respect of any liability or obligation of any person save for any guarantee or surety (*Bürgschaft*) which is expressly permitted under Paragraph 16(a)(i) and (ii) (*Guarantees*) of Schedule H (*General Undertakings*) of the Finance Contract:
- (ii) The Guarantor shall procure that, as soon as any Group Company becomes a Material Subsidiary (as identified in any accounts delivered to the Bank from time to time pursuant to Article 6.01 (*Financial Information*)), that Group Company shall promptly notify the Bank and on the Bank's request enter into a Guarantee Agreement and provide the Bank with the documentary conditions precedent (each in form and substance satisfactory to the Bank) listed in Part B of Schedule F (*Guarantor Conditions Precedent*) of the Finance Contract within [*****] Business Days following the date on which such Subsidiary qualifies as a Material Subsidiary, subject to general statutory limitations, financial assistance, capital maintenance, corporate benefit, fraudulent preference, "thin capitalisation" rules, retention of title claims and similar principles may limit the ability of a Guarantor to provide a guarantee or security or may require that the guarantee be limited by an amount or otherwise **provided that** the Guarantor and each Group Company will ensure to overcome such obstacles and, if applicable, to assist in demonstrating that adequate corporate benefit accrues to each Guarantor.

(v) **Hedging**

The Guarantor shall not, and shall procure that no other Group Company shall, enter into any derivative transaction other than a Permitted Hedging.

(w) **Restrictions on distributions**

The Guarantor shall not, and shall procure that no other Group Company shall, declare or distribute dividends, or return or purchase shares, save for:

- (i) with the prior written consent of the Bank;
- (ii) payments to a Group Company as a result of a solvent liquidation or reorganisation of a Group Company which is not an Obligor;
- (iii) any dividend payments made by any Subsidiary; and

(iv) any dividend payments made by an Obligor to another Obligor.

(x) Restrictions on loans

The Guarantor shall not, and shall ensure that no other Group Company will, be a creditor in respect of any Indebtedness, save for:

- (i) with the prior written consent of the Bank;
- (ii) any trade credit extended by it or any other Group Company to its customers on normal commercial terms and in the ordinary course of its trading activities;
- (iii) any loan made by one Group Company (other than an Obligor) to another Group Company (other than an Obligor);
- (iv) a loan made by one Obligor to another Obligor; or
- (v) any other Indebtedness or loan advanced to or made available by any member of the Group with the prior written consent of the Bank.

(y) Restrictions on intercompany loans

The Guarantor shall not, and shall procure that no other Group Company shall, make any payment in respect of any intercompany loan, save for:

- (i) with the prior written consent of the Bank;
- (ii) where the lender of the intercompany loan is the Guarantor, the Borrower or an Obligor; or
- (iii) the payments to a Group Company as a result of a solvent liquidation or reorganisation of a Group Company which is not an Obligor.

(z) Intellectual Property Rights

The Guarantor shall, and shall procure that no other Group Company shall, (i) obtain, safeguard and maintain its rights with respect to the Intellectual Property Rights required for the implementation of the Investment in accordance with this Contract, including complying with all material contractual provisions and that the implementation of the Investment in accordance with the Finance Contract will not result in the infringement of the rights of any person with regard to the Intellectual Property Rights and (ii) ensure that any Intellectual Property Rights required for the implementation of the Investment will be owned by or licensed to the Borrower, and where such Intellectual Property Rights which are owned by a Group Company are capable of registration, are registered to such party.

(aa) Maintenance of Status

The Guarantor shall, and shall procure that each other Group Company shall, remain duly incorporated and validly existing as a corporate entity with limited liability under the jurisdiction in which it is incorporated and that it will have no centre of main interests, permanent establishment or place of business outside the jurisdiction in which it is incorporated, and that it will continue to have the power to carry on its business as it is now being conducted and continue to own its property and other assets.

(bb) Negative pledge

- (i) The Guarantor shall not (and shall procure that no other Group Company shall) create or permit to subsist any Security over any of its assets, unless it constitutes a Permitted Security.
- (ii) For the purposes of Paragraph (i) above, the term Security shall also include any arrangement or transaction on assets or receivables or money (such as the sale, transfer or other disposal of assets on terms whereby they are or may be leased to or acquired by the Guarantor or any Group Company, the sale, transfer or other disposal of any receivables on recourse terms or any arrangement under which money or the benefit of a bank account or other account may be applied or set off or any preferential arrangement having a similar effect) in circumstances where the arrangement or transaction is entered into primarily as a method of raising credit or of financing the acquisition of an asset.

(cc) **Other Undertakings**

The Guarantor shall take note of the Bank's group statement on tax fraud, tax evasion, tax avoidance, aggressive tax planning, money laundering and financing of terrorism (as published on the Bank's website and as may be amended from time to time).

(dd) **Data Protection**

Before disclosing any personal data (other than mere contact information relating to the Guarantor's personnel involved in the management of this Guarantee Agreement) to the Bank in connection with this this Guarantee Agreement, the Guarantor shall ensure that each data subject of those personal data:

- (i) has been informed of the disclosure (including the categories of personal data to be disclosed); and
- (ii) has the information in (or has been provided with an appropriate link to) the Bank's privacy statement in relation to its lending and investment activities set out at the relevant time at <https://www.eib.org/en/privacy/lending> (or such other address as the Bank may notify to the Borrower in writing from time to time).

(ee) **European Union Distributions and Sales**

Subject to receipt of approval to commercialise the SARS-CoV-2 Vaccine from the European Medicines Agency, the Guarantor shall procure that the Borrower shall use its best commercial efforts to ensure that a reasonable and equitable amount of the future distribution of the SARS-CoV-2 Vaccine as well as other vaccines and products to be manufactured in the GMP IV occurs within the European Union.

Information to the Bank

5.03 Financial Information

The Guarantor shall deliver to the Bank:

- (a) as soon as they become available but in any event within [*****] days after the end of each of its financial years, a copy of its audited consolidated and unconsolidated annual reports, balance sheets, cash flow statements, profit and loss accounts for that financial year together with all other such information as the Bank may reasonably require as to the Guarantor's and the Group's financial situation; and
- (b) from time to time, such further information on its general financial position, business and operation as the Bank may reasonably request.

5.04 **Information duties**

During the subsistence of this Guarantee Agreement, the Guarantor shall immediately inform the Bank of:

- (a) any material alteration to its constitutional documents and of any proposal or decision known to it which envisages the introduction of such alteration as well as of any material change in its corporate status or powers, in each case in so far as such event could reasonably be expected to affect the validity and enforceability of this Guarantee Agreement or the ability of the Guarantor to perform the obligations expressed to be assumed by it under this Guarantee Agreement;
- (b) a Change-of-Law Event with respect to the Guarantor; and
- (c) deliver any other information on its financial position likely to have a detrimental effect on its ability to perform the obligations expressed to be assumed by it under this Guarantee Agreement.

For the purposes of this Article 5.04, “**Change-of-Law Event**” means the enactment, promulgation, execution or ratification of or any change in or amendment to any law, rule or regulation (or in the application or official interpretation of any law, rule or regulation) that occurs after the date of this Guarantee Agreement and which, in the opinion of the Bank, would materially impair the Guarantor’s ability to perform its obligations under this Guarantee Agreement.

ARTICLE 6

Default interest and Taxes

6.01 Taxes

All Taxes, charges, duties, fees as well as any other expenses or impositions of whatsoever nature, arising out or in connection with this Guarantee Agreement shall be borne by the Guarantor. The Guarantor shall make all payments under this Guarantee Agreement gross without withholding or deduction of any Tax, charges, duties, fees, expenses or impositions of whatsoever nature

If any amount in respect of any applicable Taxes, charges, duties, fees as well as any other expenses or impositions must be deducted, withheld or retained from any amount due under this Guarantee Agreement, the Guarantor undertakes to pay such additional amount as may be necessary to ensure that the Bank receives a net amount equal to the full amount to which it is entitled under this Guarantee Agreement.

The Guarantor undertakes to pay and indemnify the Bank against any amount, cost or loss incurred by the Bank in relation to any stamp duty, registration or similar Tax or notarial fee payable in respect of the Guarantor.

6.02 Interest on overdue sums

If the Guarantor fails to pay any amount (other than any interest amount) payable by it under this Guarantee Agreement within the relevant Payment Period in accordance with Article 3.02 (*Demands and payments*), interest shall accrue on any such overdue amount (other than any interest amount) payable under the terms of this Guarantee Agreement, as from the expiration of the relevant Payment Period up to the date of payment by the Guarantor, at the rate and on the terms specified in Article 4.4 (a) (*Interest on overdue sums*) of the Finance Contract.

If the Guarantor fails to pay interest payable by it under this Guarantee Agreement on its due date, Article 4.4 (b) (*Interest on overdue sums*) of the Finance Contract shall apply.

For the purpose of determining EURIBOR, the relevant periods within the meaning of Schedule B (*Definition of EURIBOR*) of the Finance Contract shall be successive periods of [*****] commencing on the expiration of the Payment Period. If the overdue sum is in a currency other than the currency of the Loan, the following rate per annum shall apply, namely the relevant interbank rate that is generally retained by the Bank for transactions in that currency plus [*****]% ([*****] basis points), calculated in accordance with the market practice for such rate.

6.03 Other charges

All reasonable fees, charges and expenses (including legal fees) incurred as result or in connection with the negotiation, preparation, execution, implementation, registration, enforcement, termination or translation of this Guarantee Agreement or any related document, any amendment, supplement or waiver in respect of this Guarantee Agreement or any related document shall be borne by the Guarantor.

6.04 Currency conversion

Any payment to be made by the Guarantor under this Guarantee Agreement shall be made in the currency as set out in the relevant Notification. The Bank shall apply the exchange rate published by the European Central Bank in Frankfurt for the purpose of any currency conversion.

If the Bank has received a payment under this Guarantee in a currency other than the currency requested in the relevant Notification and must convert this payment, the Guarantor shall indemnify the Bank, upon first demand, for any loss resulting from the difference in exchange rates between the date of conversion and the date on which the payment is received in the other currency, as well as for any fees (including legal fees, Taxes and any other charges) connected with this conversion.

6.05 Set-off

All payments to be made by the Guarantor under this Guarantee Agreement shall be made without (and free and clear of any deduction for) set-off or counterclaim unless the counterclaim is undisputed or has been confirmed in a final non-appealable judgement.

ARTICLE 7

Continuing obligations

It is hereby expressly agreed that any change, whatsoever, in the legal situation of the Guarantor shall not affect its obligations under this Guarantee Agreement and that in particular, in case of merger, demerger or absorption, the absorbing new or beneficiary company shall take over, under the merger treaty or agreement, the commitments of the Guarantor under this Guarantee Agreement and in case of demerger, the demerger companies benefiting from the partial assignment of assets resulting from the split will be bound to:

- (a) take over with joint liability the commitments of the Guarantor under this Guarantee Agreement; and
- (b) if requested by the Bank, grant additional security or guarantees.

ARTICLE 8

Non waiver

No failure or delay or single or partial exercise by the Bank in exercising any of its rights or remedies under this Guarantee Agreement shall be construed as a waiver of such right or remedy and the Bank shall not be liable for any such failure, delay or single or partial exercise of any such right and remedy.

ARTICLE 9

Law and jurisdiction, miscellaneous

9.01 Governing Law

This Guarantee Agreement and any non-contractual obligations arising out of or in connection with it shall be governed by the laws of Germany.

9.02 Jurisdiction

- (a) The courts of Frankfurt am Main, Germany, have exclusive jurisdiction to settle any dispute (a “**Dispute**”) arising out of or in connection with this Guarantee Agreement (including a dispute regarding the existence, validity or termination of this Guarantee Agreement or the consequences of its nullity) or any non-contractual obligation arising out of or in connection with this Guarantee Agreement.
- (b) The parties agree that the courts of Frankfurt am Main, Germany., are the most appropriate and convenient courts to settle Disputes between them and, accordingly, that they will not argue to the contrary.
- (c) This Article 9.02 is for the benefit of the Bank only. As a result and notwithstanding Sub-Paragraph (a) above, it does not prevent the Bank from taking proceedings relating to a Dispute in any other courts with jurisdiction. To the extent allowed by law, the Bank may take concurrent proceedings in any number of jurisdictions.

9.03 Place of performance

Unless otherwise specifically agreed by the Bank in writing, the place of performance under this Guarantee Agreement, shall be the seat of the Bank.

9.04 Evidence of sums due

In any legal action arising out of this Guarantee Agreement the certificate of the Bank as to any amount or rate due to the Bank under this Guarantee Agreement shall, in the absence of manifest error, be *prima facie* evidence of such amount or rate.

9.05 Entire Agreement

This Guarantee Agreement constitutes the entire agreement between the Bank and the Guarantor in relation to the provision of this Guarantee Agreement hereunder, and supersedes any previous agreement, whether express or implied, on the same matter.

9.06 Invalidity

If at any time any term of this Guarantee Agreement is or becomes illegal (*nichtig*), invalid or unenforceable in any respect, or this Guarantee Agreement is or becomes ineffective (*unwirksam*) in any respect, under the laws of any jurisdiction, such illegality (*Nichtigkeit*), invalidity, unenforceability or ineffectiveness (*Unwirksamkeit*) shall indisputably (*unwiderlegbar*) not affect:

- (a) the legality, validity or enforceability in that jurisdiction of any other term of this Guarantee Agreement or the effectiveness in any other respect of this Guarantee Agreement in that jurisdiction; or

- (b) the legality, validity or enforceability in other jurisdictions of that or any other term of this Guarantee Agreement or the effectiveness of this Guarantee Agreement under the laws of such other jurisdictions,

without any party to this Guarantee Agreement having to argue (*darlegen*) and prove (*beweisen*) such parties' intent to uphold this Guarantee Agreement even without the void, invalid or ineffective provisions.

The illegal, invalid, unenforceable or ineffective provision shall be deemed replaced by such legal, valid, enforceable and effective provision that in legal and economic terms comes closest to what the parties to this Guarantee Agreement intended or would have intended in accordance with the purpose of this Guarantee Agreement if they had considered the point at the time of conclusion of this Guarantee Agreement. The same applies in the event that this Guarantee Agreement does not contain a provision which it needs to contain in order to achieve the economic purpose as expressed herein (*Regelungslücke*).

9.07 Amendments

Any amendment to this Guarantee Agreement (including this Article 9.07) shall be made in writing (or in notarial form, if required) and shall be signed by the parties hereto. Any amendment to this Guarantee Agreement shall be made in writing (or in notarial form, if required) and shall be signed by the parties hereto.

9.08 Counterparts

This Guarantee Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Each counterpart is an original, but all counterparts shall together constitute one and the same instrument.

9.09 Assignment and transfer by the Bank

- (a) The Bank may assign or transfer (by way of assumption of debt (*Vertragsübernahme*), novation, sub-participation or otherwise) all or part of its rights, benefits or obligations under the Finance Documents. The Guarantor herewith consents to any such assignment or transfer.
- (b) The Bank shall have the right to disclose all information relating to or concerning the Guarantor, the Group, the Finance Documents and the Loan in connection with or in contemplation of any such assignment or transfer.

ARTICLE 10

Final Articles

10.01 Form of notice

- (a) Any notice or other communication given under this Guarantee Agreement must be in writing and, unless otherwise stated, may be made by letter and electronic mail.
- (b) Notices and other communications for which fixed periods are laid down in this Guarantee Agreement or which themselves fix periods binding on the addressee, may be made by hand delivery, registered letter or by electronic mail. Such notices and communications shall be deemed to have been received by the other party:
 - (i) on the date of delivery in relation to a hand-delivered or registered letter; or
 - (ii) in the case of any electronic mail, when the electronic mail is received in readable form.
- (c) Any notice provided by the Guarantor to the Bank by electronic mail shall:
 - (i) mention the Contract Number in the subject line; and
 - (ii) be in the form of a non-editable electronic image (pdf, tif or other common non-editable file format agreed between the parties) of the notice signed by one or more Authorised Signatories of the Guarantor as appropriate, attached to the electronic mail.
- (d) Notices issued by the Guarantor pursuant to any provision of this Guarantee Agreement shall, where required by the Bank, be delivered to the Bank together with satisfactory evidence of the authority of the person or persons authorised to sign such notice on behalf of the Guarantor and the authenticated specimen signature of such person or persons, unless such person is listed in the then current List of Authorised Signatories.
- (e) Without affecting the validity of electronic mail or communication made in accordance with this Article 10.01 (*Form of notice*), the following notices, communications and documents shall also be sent by registered letter to the relevant party at the latest on the immediately following Business Day:
 - (i) Disbursement Acceptance;
 - (ii) any notices and communication in respect of the cancellation of a disbursement of any Tranche, Prepayment Request, Prepayment Notice, Event of Default, any demand for prepayment, and
 - (iii) any other notice, communication or document required by the Bank.

- (f) The parties agree that any above communication (including via electronic mail) is an accepted form of communication, shall constitute admissible evidence in court and shall have the same evidential value as an agreement under hand.
- (g) Any communication or document made or delivered to the Guarantor in accordance with this Article 10.01 (*Form of notice*) will be deemed to have been made or delivered to each of the Obligors or any other member of the Group party to a Finance Document. Each Obligor incorporated in Germany, for this purpose, appoints the Borrower as its receipt agent (*Empfangsboten*).

10.02 Addresses

The address and electronic mail address (and the department or officer, if any, for whose attention the communication is to be made) of each party for any communication to be made or document to be delivered under or in connection with this Guarantee Agreement is:

For the Bank

Attention: [*****]

98 - 100 boulevard Konrad Adenauer, L-2950 Luxembourg

Email address: [*****]

For the Guarantor

Attention: [*****]

Friedrich-Miescher-Str 15, 72076 Tübingen,

Germany Email address: [*****]

[*****]

10.03 Demand after notice to remedy

The Bank and the Guarantor shall promptly notify the other party in writing of any change in their respective communication details.

10.04 English language

- (a) Any notice or communication given under or in connection with this Guarantee Agreement must be in English.
- (b) All other documents provided under or in connection with this Guarantee Agreement must be:
 - (i) in English; or
 - (ii) if not in English, and if so required by the Bank, accompanied by a certified English translation and, in this case, the English translation will prevail.

10.05 Conclusion of this Guarantee Agreement (Vertragsschluss)

- (a) The parties to this Guarantee Agreement may choose to conclude this Guarantee Agreement by an exchange of signed signature page(s), transmitted by any means of telecommunication (*telekommunikative Übermittlung*) such as by way of electronic photocopy.
- (b) If the parties to this Guarantee Agreement choose to conclude this Guarantee Agreement pursuant to this Article 10.05 (*Conclusion of this Guarantee Agreement (Vertragsschluss)*), they will transmit the signed signature page(s) of this Guarantee Agreement to [*****] (each a “**Recipient**”). This Guarantee Agreement will be considered concluded once a Recipient has actually received the signed signature page(s) (*Zugang der Unterschriftsseite(n)*) from all Parties (whether electronic photocopy or other means of telecommunication and at the time of the receipt of the last outstanding signature page(s) by such one Recipient).
- (c) For the purposes of this Article 10.05 (*Conclusion of this Guarantee Agreement (Vertragsschluss)*) only, the parties to this Guarantee Agreement appoint each Recipient as their attorney (*Empfangsvertreter*) and expressly allow (*gestatten*) each Recipient to collect the signed signature page(s) from all and for all parties to this Guarantee Agreement. For the avoidance of doubt, each Recipient will have no further duties connected with its position as Recipient. In particular, each Recipient may assume the conformity to the authentic original(s) of the signature page(s) transmitted to it by means of telecommunication, the genuineness of all signatures on the original signature page(s) and the signing authority of the signatories.
- (d) For the purposes of proof and confirmation, each party to this Guarantee Agreement has to provide the Recipients with original signature page(s) promptly, but no later than [*****] Business Days, after signing this Guarantee Agreement in accordance with this Article 10.05 (*Conclusion of this Guarantee Agreement (Vertragsschluss)*). The Bank may demand that the Guarantors subsequently sign one or more copies of this Guarantee Agreement.

IN WITNESS WHEREOF the parties hereto have caused this Guarantee Agreement to be executed in three (3) originals (two (2) originals for the Bank and two (1) original for the Guarantor) in the English language.

Signed for and on behalf of
EUROPEAN INVESTMENT BANK

Signed for and on behalf of
CUREVAC AG

/s/ Tero Pietila

/s/ Ayse Nil ADA

Name:

Name:

Name:

Name:

Tero Pietila

Ayse Nil ADA

Title: Head of Division

Title: Legal Counsel

Title:

Title:

IN WITNESS WHEREOF the parties hereto have caused this Guarantee Agreement to be executed in three (3) originals (two (2) originals for the Bank and two (1) original for the Guarantor) in the English language.

Signed for and on behalf of
EUROPEAN INVESTMENT BANK

Signed for and on behalf of
CUREVAC AG

_____	_____	<u>/s/ Franz Werner Haas</u>	<u>/s/ Pierre Kemula</u>
Name:	Name:	Name: Franz Werner Haas	Name: Pierre Kemula
Title:	Title:	Title: Acting CEO	Title: C.F.O



Code of Conduct and Ethics

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1 COVER LETTER

This document sets out CureVac's code of conduct, consisting of the principal business, ethical, moral and legal standards which the CureVac, its subsidiaries, all Employees and all members of the Supervisory Board and the Executive Board (together "Member/s") are expected to observe.

The reputation of CureVac is our highest priority and we must ensure that it is preserved and safeguarded. We have a tradition of conducting our business activities in accordance with ethical principles. This constitutes a supporting pillar of our success. While our conduct is in compliance with these principles, we all ensure that CureVac is successful in its business endeavors and that it enjoys an outstanding reputation.

As an international biopharmaceutical company, CureVac is subject to statutory provisions that vary from one country to the next. Furthermore, we are committed to upholding international agreements such as those aimed at protecting human rights, combating Corruption, and promoting sustainability. We used these commitments to establish rules of conduct for ourselves, which are described in this CureVac Code of Conduct and Ethics in a transparent manner.

All Members as well as all Employees are responsible for ensuring that their conduct is in compliance with these binding principles set forth in this CureVac Code of Conduct and Ethics, which is intended to serve as a set of guidelines and standards and describes the conduct that is expected of us in day-to-day business and work life. As always, no business deal or action is worth endangering the high degree of trust and the excellent reputation that CureVac enjoys.

We expect that the Members as well as the Employees of all CureVac companies adhere to the law, comply with rules, and conduct themselves in a manner that is in accordance with our principles. The conduct of CureVac's executives and Managers serves as an example to be followed. They embody our principles and put them into practice every day. They are the first point of contact for matters pertaining to our principles of conduct.



In addition, CureVac's Compliance organization provides assistance and advice to Employees. Don't hesitate to take advantage of the support offered by the Compliance organization. We cannot and will not tolerate violations of the CureVac Code of Conduct and Ethics. We are confident that every single one of our Employees deserves the trust that we place in them. We also expect all Employees to live up to the standards of conduct that we have set for ourselves.

The provisions of this policy replace any materially similar provisions of any existing code of conduct (or similar policy) adopted by any subsidiary of CureVac on the date this policy was first adopted, but shall apply without prejudice of any supplementary policies and guidelines which may apply from time to time to CureVac and its Affiliates. For further details and links, the Employees and Members can consult CureVac's intranet.

This policy shall be posted on the CureVac's website.



2 DEFINITIONS

Affiliates: CureVac N.V. and all other companies, partnerships, corporations, associations with or without legal personality (*rechtspersoonlijkheid*), cooperatives, mutual insurance societies, foundations or any other entity or body which operates externally as an independent unit or organization, including state or governmental institutions, departments and agencies and other entities under public law CureVac N.V. directly or indirectly has a controlling interest in.

Alleged Irregularity: An irregularity of a general, operational or financial nature which is detected, or is suspected on reasonable grounds, within the Company's organization, including the imminent or actual:

- § performance of criminal acts, such as fraud, bribery or corruption;
- § violation of applicable laws and regulations;
- § violation of ethical or professional standards, including the standards set out in this policy;
- § endangerment of public health, safety or the environment;
- § suppression, destruction, withholding or manipulation of information on the irregularity concerned.

Anti-Trust Laws: all U.S, EU and national anti-trust or competition laws

Anything of Value: includes, but is not limited to:

- § Cash, stocks, bonds or other cash equivalents;
- § Gifts (no matter how small);
- § Employment offers, promises of future employment or hiring of relatives;
- § Travel and travel-related expenses, meals and hospitality;
- § Political contributions or charitable donations;
- § Discounts, loans, per diem payments or subsidies;
- § Medical expenses;
- § Sponsorships, educational and research grants or college scholarships;
- § Shopping excursions;
- § Personal use of company premises or equipment.

Even intangibles such as services or information are included, such as state secrets, trade secrets, political information or any information that can be advantageous to the individual receiving it. Providing Anything of Value to relatives, friends, or colleagues of a relevant person are likewise covered as indirect benefits to that person.

Bribe or Bribery: an inducement, benefit, gift, reward or Anything of Value, in any form whatsoever, offered, promised, given, rewarded or provided in order to gain a commercial, contractual, regulatory or personal advantage

Business Partner(s): any Third Party CureVac does business with, including suppliers, consultants and customers

Chairman: the chairman of the Supervisory Board.



Code of Conduct and Ethics

Company or CureVac: CureVac N.V. and, where applicable, its Affiliates

Compliance: the compliance functions at CureVac N.V.

Compliance Committee: a permanently established committee consisting of members from CureVac's Compliance, Legal, Human Resources and Finance departments that considers facts obtained in connection with a Compliance matter and renders advice.

Compliance Management Policy: defines the principles of the Compliance Management System (CMS) and, therefore, provides Members and Employees with orientation and assistance.

Compliance Management System (CMS): the system of compliance described in the Compliance Management Policy

Compliance Officer: an individual appointed by CureVac to serve and oversee Compliance functions with a direct reporting line to the Management Board.

Corruption: the abuse of a position of employment, authority or trust to gain an Improper (Personal) Advantage in breach of duty.

Employee(s): employees, as well as officers, including permanent and temporary employees, leased and contract employees of CureVac N.V. and/or any of its Affiliates (including Managing Directors or Affiliates).

Gifts: gifts include any kind of benefit to someone as a sign of appreciation or friendship without expectation of receiving anything in return. This includes, for example, small gifts given at culturally recognized occasions (e.g. weddings, funerals) or special times of the year (e.g. Christmas, New Year). Gifts are also promotional items of nominal value which might bear CureVac's company logo.

Improper (Personal) Advantage: improper commercial or other advantage means an advantage which is brought about because of someone performing (or failing to perform) a function or activity illegally, unethically, in bad faith, not impartially, or in breach of a position of trust.

Insider Trading Policy: the policy on insider trading established by CureVac.

Kickbacks: kickbacks are typically payments or other benefits made in return for a business favor or advantage.

Legal Department: CureVac N.V.'s legal department

Manager(s): all CureVac employees who have personnel responsibility

Management Board: the board of directors or managing directors of CureVac N.V.



Code of Conduct and Ethics

Member(s): a member of either the Management Board or the Supervisory Board, as the case may be, or any of its Affiliates.

Supervisory Board: Supervisory Board of CureVac N.V.

Third Party(ies): includes, but is not limited to, suppliers, vendors, contractors/consultants, sub-contractors and contract manufacturers.

Whistleblower: A person reporting an Alleged Irregularity.



3 INTRODUCTION

It is the policy of the Company that the Members and all Employees of the Company and of each of its Affiliates adhere to the following principles governing our professional behavior and ethical conduct in the fulfillment of our respective responsibilities and, thereby, through our own actions, each and every one of us shall contribute to the shared corporate culture of the *RNApeople*®. This Code of Conduct and Ethics defines the main principles in a general form. Some of these are further described in specific guidelines referenced herein.

Failure to observe this policy may not only result in legal difficulties for the Company, but could also give rise to legal and/or disciplinary action against the Employee or Member concerned, including dismissal. Depending on the nature of the non-compliance, failure to observe this policy may be reported to the appropriate authorities.

4 INTEGRITY AT CUREVAC

4.1 HONESTY AND INTEGRITY

Each Member and Employee shall act with honesty and integrity and in an ethical manner. Each Member and Employee shall endeavor to deal fairly with the Company's Business Partners, suppliers, competitors and with other Employees.

4.2 ETHICAL BEHAVIOR, MUTUAL RESPECT AND EQUALITY

Each Member and Employee shall proactively attempt to promote ethical behavior among his or her subordinates, peers and other Employees as well as towards Business Partners. When dealing with each other and Third Parties, each Member and Employee shall maintain an atmosphere of openness and tolerance, respect and politeness as well as fairness and trust and shall, therefore, not tolerate statements or behavior that may lead to animosity or hostility towards any of our shareholders, Members, Employees, Business Partners or any other Third Party.



Each Member and Employee shall discriminate no-one based on a person's gender and/or sexual identity, race or color, ethnic origin or nationality, age, religion, ideology or philosophy of life, or due to a (physical and/or mental) disability, medical condition or otherwise.

Any treatment, which intends to systematically belittle, exclude or impose unfair pressure on Employees either conducted by colleagues or by superiors, will not be tolerated by CureVac and will lead to legal consequences.

CureVac is an equal opportunity employer and each Member and Employee shares the responsibility for fulfilling CureVac's commitment to equal employment opportunities.

4.3 HEALTH, SAFETY AND ENVIRONMENT

The operations of CureVac are conducted in compliance with applicable health, safety and environmental laws and regulations, Company standards and best practices. CureVac takes all reasonable and practical steps to ensure that a safe, healthy and clean working environment is provided. CureVac is consistently evaluating and undertaking appropriate measures in the workplace to sustainably save resources and the natural environment. Likewise, the Employees must ensure that the working environment is safe and healthy. Therefore, it is absolutely necessary that all regulations regarding the protection of Employees, all safety and environmental regulations are strictly followed.

It is forbidden to illegally possess or consume drugs while working on CureVac and its subsidiaries premises or otherwise conducting Company business. Employees and Members may not be impaired by drugs or alcohol at work.

4.4 CONFLICTS OF INTEREST AND CORPORATE OPPORTUNITIES

Each Employee shall avoid Conflicts of Interest between his or her personal, private interests and the interests of the Company and seek to avoid the appearance of such Conflicts of Interest. A Conflict of Interest may arise when an individual takes action or has interests that complicate or influence the objectivity and effectiveness of his or her Company-work performance or when an individual takes advantage of his or her position at the Company for improper (financial or other) personal benefit.



Members with a Conflict of Interest should consult CureVac's Management Board Rules or Supervisory Board Rules, as the case may be.

Members and Employees are expected to advance the Company's legitimate business interests.

A Member and Employee shall not:

- a. enter into competition with the Company;
- b. provide unjustified advantages to third parties to the detriment of the Company; or
- c. take advantage of business opportunities available to the Company for himself or for his spouse, registered partner or other life companion, foster child or any relative by blood or marriage up to the second degree.

If an Employee or Member discovers, or is presented with, a business opportunity through the use of property or resources of the Company, or because of his position with the Company, he shall first disclose the terms and conditions of such business opportunity to his direct supervisor, who shall consult with the appropriate level of management to determine whether the Company wishes to pursue the business opportunity concerned.

If the decision is made not to pursue a business opportunity as referred hereto for the benefit of the Company, Employees and Members may, upon review and approval by their direct supervisor, pursue such business opportunity substantially on the original terms and conditions presented to the Company.

4.5 LAW COMPLIANCE

Each Member and Employee shall comply with all applicable laws and orders of governmental or public entities applicable to the Company, the rules and regulations of agencies having jurisdiction over the Company – as the case may be – and any internal rules and guidelines as may be implemented or amended from time to time. Each Employee and Officer is expected to familiarise himself with these laws and regulations, to the extent relevant and appropriate in relation to the performance of his activities for the Company.



5 INTEGRITY WITH OUR BUSINESS PARTNERS

5.1 GOOD FAITH

Each Member and Employee shall act in good faith, responsibly, with due care and diligence, without misrepresenting or omitting material facts or allowing his or her independent judgment to be compromised.

5.2 COMPETITION, ANTI-TRUST

CureVac is a company which is mainly involved in research and development of substances and products that are supposed to become medicinal products for individual patients upon receipt of marketing authorization and their commercialization.

Hence, CureVac does not compete with other companies on product markets. It is rather the market for RNA-based research and development where CureVac competes with other companies. CureVac also competes with other companies on the talent market. CureVac is well aware that under Anti-Trust Laws, it is illegal to enter into agreements, understandings or coordinated activities with actual or potential competitors; in particular, it is illegal to coordinate with competitors in violation of Anti-Trust Laws to:

- § Fix prices (e.g. upfront and milestone payments, royalties), premiums or specific elements thereof;
- § Limit or restrict the output of products and services supplied;
- § Allocate markets geographically or with regard to customer segments or product lines.

Members and Employees might meet representatives from competitors at conferences, at trade fairs, associations or otherwise. In those instances, Members and Employees shall not share any commercially confidential information nor shall they receive any such information (see also below on Confidentiality).



Furthermore, CureVac concludes all sorts of agreements, mostly in the areas of research, development, services and licensing of intellectual property, which might include clauses that could raise Anti-Trust concerns.

Therefore, all agreements are to be assessed by the Legal Department. In this regard, Anti-Trust Compliance is accomplished.

5.3 ANTI-BRIBERY AND ANTI-CORRUPTION

It is a serious offense throughout the world to accept or grant benefits for the purpose of obtaining a material or immaterial advantage for oneself personally or a Third Party. In connection with business activities of all types, no Member or Employee may seek to provide himself/herself, Business Partners, their Employees or other Third Parties (e.g. government officials, test persons, study leaders as well as other members of clinical studies) with such impermissible advantages.

This is to be assumed in particular whenever the type and scope of said advantage are apt to unduly influence actions and decisions of the recipient.

Third Parties (for example consultants, service providers, sponsors, representatives or other intermediaries) must not be taken advantage of to circumvent these regulations.

So-called “cultural expectations” such as an alleged custom in a certain country or region to accept Gifts and other benefits in exchange for business or, otherwise, to engage in Bribery and Kickbacks, are no excuse to violate this Code of Conduct and Ethics and the applicable laws.

Individual violations of the Anti-Corruption Laws can possibly also jeopardize CureVac as a corporation and its reputation (by loss of trust etc.). Any violation of this paragraph will, therefore, have labor law and, as the case may be, criminal law consequences.



5.4 ANTI-MONEY LAUNDERING

CureVac complies with all relevant national and international laws and regulations relating to anti-money laundering.

We are committed to the international fight against money laundering and financing of terrorism or drug trafficking. It is our objective to conduct business only with reputable Business Partners.

Payment transactions (except for petty cash transactions) are never conducted in cash. We do not transfer payments to bank accounts in countries or to persons embargoed by the U.S. or the EU. Transfers to private bank accounts of Business Partners are prohibited.

5.5 INTERNATIONAL TRADE, EXPORT CONTROLS

We are committed to complying with all applicable export and import laws, including, without limitation, sanctions, embargoes and other laws, regulations, government orders or policies.

6 PROTECTION OF COMPANY ASSETS

6.1 USE OF COMPANY ASSETS

Each Member and Employee shall use Company assets, facilities and resources accessible or employed by or entrusted to him or her in a responsible manner for legitimate business purposes and not for Improper Personal Advantage. An Employee or Member shall promptly report to his direct supervisor any misuse of Company property or resources.

Without proper authorization from their direct supervisor, Employees and Members shall not:

- a. obtain, use or divert property or resources of the Company for personal gain; or
- b. materially alter, remove or destroy property or resources of the Company or use services provided by the Company, except in the ordinary course of performing activities for the Company.



6.2 CONFIDENTIALITY, INSIDER TRADING

Each Member and Employee shall respect the confidentiality of information (incl. but not limited to personal data of others as well as business information and know-how in which form ever) acquired in the course of the performance of his or her responsibilities, except when authorized by persons with appropriate authority or legally obligated to disclose such information. No Member or Employee shall use confidential information acquired in the course of the performance of his or her responsibilities for Improper Personal Advantage. The prohibitions of this paragraph are intended to be in addition to, and not in limitation of, any other obligations of confidentiality a Member or Employee owes to the Company (e.g. based on the basis of the individual engagement or employment agreement).

The applicable restrictions and prohibitions on market abuse, including concerning the unlawful use and disclosure of inside information, tipping and market manipulation, are specific and complex. Employees and Officers should refer to and familiarise themselves with the Company's Insider Trading Policy, which contains detailed rules on the possession of, and conducting and effecting transactions in, the Company's shares and certain other financial instruments.

6.3 DATA PROTECTION AND IT SECURITY

Personal data must be processed exclusively within the framework of the relevant data-protection regulations.

Handling sensitive data (e.g. patient data) is subject to strict requirements. Violations involving transfer of sensitive data can also be charged as criminal offense. Sensitive data must be protected at all times. A transfer of such data to Third Parties is restricted. In any case, personal data may only be used for the purposes for which they were collected.

Passwords (e.g. for computers, laptops) must be kept secret. Confidential information must be stored securely.



6.4 DOCUMENTATION, SIGNATURE POLICY AND BOOKS, RECORDS AND ACCOUNTING

All business transactions must be documented in a timely manner, completely and correctly in accordance with the legal regulations and, additionally, according to the internal CureVac policies. Every Member and Employee is committed to this goal. In this respect, the following applies:

- § Employees are entitled only within the framework of the Signature Policy to make binding statements and Declarations of Will on behalf of CureVac or to sign contracts, respectively. In this respect, the four-eye-principle is a key principle.
- § Correct accounting is an important part for controlling Company decisions, for correct financial statements and for the required information about the financial situation. To the extent Members and Employees are responsible for accounting tasks, they are expected to be familiar with all current financial and accounting policies and comply with them.

6.5 PUBLIC COMMUNICATION

The Company will disclose information to the public only through specific channels, and promotes the full, fair accurate and timely and understandable disclosure in reports filed with the relevant authorities and other public communications.

Unless a Member or Employee has received proper authorisation to speak on behalf of the Company by the appropriate level of management, an Employee or Member should decline to comment in response to any media requesting information about matters relating to the Company, regardless of whether the request is made off the record, for background, or confidentially.



Each Member and Employee shall ensure, for opinions expressed at events, in public or in publicly accessible communication forums, that personal views are labelled as such. During public appearances on behalf of CureVac, each Member and Employee shall ensure that their actions or statements do not cause harm to CureVac, its shareholders and its Employees or damage their good reputation.

Members and Employees are not permitted to make any disclosure of material non-public information about the Company to any person or entity outside the Company.

7 CORPORATE SOCIAL RESPONSIBILITY

7.1 PRINCIPLES OF MEDICAL RESEARCH

Ethical principles as well as all applicable laws shall be analyzed and followed in any research activities of CureVac taking place either internally or commissioned by Third Parties. This includes the following in particular:

- § The observance of ethical principles such as the “Declaration of Helsinki” when conducting clinical studies with humans.
- § The observance of ethical principles and regulations for carrying out animal testing.
- § The observance of scientific rules for obtaining research results. In particular, the observance of scientific standards in obtaining research results and data. In this respect, we follow the recommendations of the commission “Professional self-regulation in science” – proposals for safeguarding good scientific practice (e.g. guidelines of the German Research Foundation).
- § The correct handling of the publication of scientific studies and of the protection of the data contained therein.
- § The applicable laws and guidelines for conducting clinical studies (e.g. European GCP and GMP legislation, German Pharmaceuticals Act, country-specific laws and regulations, GCP and GMP Guidelines).



7.2 HEALTHCARE CODICES

CureVac is aware that not only laws and regulations stipulated by governments and multinational institutions are setting minimum levels of required business conduct. As an active player, we carefully analyze standards such as:

- § EFPIA HCP Code (European Federation of Pharmaceutical Industries and Associations)
- § FSA Code of Conduct for Healthcare Professionals (“Freiwillige Selbstkontrolle für die Arzneimittelindustrie e.V.”)
- § PhRMA Code on Interactions with Healthcare Professionals (“Pharmaceutical Research and Manufacturers of America”)

8 CONTACT AND SUPPORT

8.1 WHISTLEBLOWER

Current and former Employees and Members may report Alleged Irregularities to the Compliance Officer. Alleged Irregularities shall be reported in writing or in person. Anyone reporting an Alleged Irregularity should provide as much relevant and concrete information as possible in order for the Alleged Irregularity to be investigated properly. Each reported Alleged Irregularity shall be treated seriously.

Each Whistleblower has the right, and shall be given the opportunity by the Company, to consult with an independent confidential counsellor concerning the Alleged Irregularity reported by such Whistleblower. Such counsellor shall be designated by the Compliance Officer.

To the extent that the Dutch Act on the Whistleblowers' Institute (*Wet Huis voor Klokkeluiders*) is applicable in relation to the Company, a Whistleblower may also turn to the Whistleblowers' Institute (*Huis voor klokkeluiders*), subject to and in accordance with the provisions of such Act, in order to report an Alleged Irregularity.



Alleged Irregularities concerning the functioning of:

- a. the Compliance Officer may be reported to any Managing Director;
- b. a Managing Director or a Supervisory Director who is not the Chairman may be reported to the Chairman; and
- c. the Chairman may be reported to the Chief Executive Officer.

The Company shall treat and safeguard as private and confidential the identity of each Whistleblower, as well as any Alleged Irregularity reported by such Whistleblower. Such information shall not be disclosed by the Company, unless:

- a. with the consent of the Whistleblower concerned;
- b. this is required under applicable laws or regulations, stock exchange requirements and/or by any competent authority; or
- c. it concerns a disclosure to the professional advisors of the Company or of the Whistleblower concerned, subject to a duty of confidentiality and only to the extent necessary for any lawful purpose.

The Company shall not take disciplinary action or other adverse employment action against a Whistleblower in retaliation for properly reporting Alleged Irregularities in good faith, or for providing truthful information in good faith in connection with any investigation, inquiry, hearing or legal proceedings involving Alleged Irregularities. However, a Whistleblower who knowingly reports Alleged Irregularities in a manner which is not truthful and in good faith, or does so in a reckless or frivolous manner, may be subject to legal and/or disciplinary action, including dismissal.

8.2 CONTACT AND SUPPORT

This Code of Conduct and Ethics as well as all policies are meant to give you guidance and help to a safe way to Compliance in a complex area of many rules.

The first contact for any Member or Employee in relation to questions or uncertainty regarding principles of conduct or other areas of suspicion and legal doubt is their Manager. Everyone can also contact the Compliance Officer, the Legal Department or the central Compliance mailbox.



Code of Conduct and Ethics

A Conflict of Interest, as described above, can, but may not necessarily, constitute an infringement – depending on the individual case - if properly addressed.

Actual and potential Conflicts of Interest must be promptly called to the attention of the **Chief Executive Officer** or **Chief Operating Officer** of the Company (from time to time).

Any transactions or relationships of an Employee potentially contaminated with any such Conflict of Interest are prohibited except with the prior written consent of the Supervisory Board of CureVac. Any such Conflicts of Interest or potential Conflicts of Interest shall be resolved in an ethical manner with due consideration being given to the legitimate interests of the Company.

Any violation or potential violation of this Code by a Member should be promptly reported to the **Chief Operating Officer** of the Company or the **Chief Executive Officer** of the Company (from time to time). In case of violation or potential violation of this Code by the Chief Executive Officer and/or the Chief Corporate Officer – as the case may be -, reporting of all such violations and potential violations will be made to the Supervisory Board of CureVac. Any such violation or potential violation may also be reported directly to the Chairman of the Supervisory Board or to any other Member that the person reporting deems to be appropriate.

With respect to Members, the Supervisory Board of CureVac has the power and authority to monitor Compliance with this Code, investigate potential or alleged violations of the Code, make determinations (including acting on requests for waivers from the provisions hereof) and take decisions (or recommendations to appropriate Members) with respect to penalties and consequences for violations of this Code (after opportunity to be heard).

Any violation or potential violation of this Code by an Employee, other than a Member, should be promptly reported to the **Compliance Officer** of the Company (compliance@curevac.com). With regards to Employees, the Management Board has the power and authority to monitor Compliance with this Code, investigate potential or alleged violations of the Code, make determinations (including acting on requests for waivers from the provisions hereof) and take decisions with respect to penalties and consequences for violations of this Code (after opportunity to be heard). Such power and authority may be delegated as a whole or partially to the Compliance Officer.



Code of Conduct and Ethics

It is also important to understand that violation of certain policies set forth in this Code and legal requirement may subject the individual(s) concerned to civil liability and damages, regulatory sanction and/or criminal prosecution. There will be no reprisals for reporting an actual or possible violation of this Code, provided the reporting person is not a party to or responsible for (alone or with others) the violation.

Each Member and each Employee shall be required to individually acknowledge and certify as to his or her Compliance with this Code. Managers are expected to convey the Compliance message and provide guidance to the Employees they oversee.

Any waivers (including the reasons for the waiver) of this Code for Members must be approved by the Supervisory Board and appropriately disclosed in accordance with all laws and rules applicable to the Company – as the case may be.

CureVac expects the Members of its Supervisory Board as well as of its Management Board and its Employees to obey to this Code. All Members and Employees are required to familiarize themselves with its contents, acknowledge and act in compliance with them. After all, it forms the foundation of our daily work and interaction with each other as well as with Third Parties. It is our responsibility that we all know and adhere to this Code. CureVac's Managers are the first point of contact for questions and will support their staff in acting in accordance with our values.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated April 29, 2020, with respect to the consolidated financial statements of CureVac AG, included in Amendment No. 1 to the Registration Statement (Form F-1 No. 333-240076) and related Prospectus of CureVac B.V. for the registration of its common shares.

/s/ Dr. Elia Napolitano
Wirtschaftsprüfer
(German Public Auditor)

/s/ Steffen Maurer
Wirtschaftsprüfer
(German Public Auditor)

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft
Munich, Germany
July 31, 2020
