UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of November 2020

Commission File Number 001-39446

CureVac N.V.

Friedrich-Miescher-Strasse 15, 72076 Tübingen, Germany +49 7071 9883 0 (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

FORM 20-F 🗵 FORM 40-F 🗆

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:

YES \Box NO \boxtimes

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-____

On November 2, 2020, CureVac N.V. (the "Company") issued a press release reporting interim Phase 1 data for its COVID-19 vaccine candidate, CVnCoV. The press release is attached hereto as Exhibit 99.1.

The information in this Form 6-K (including Exhibit 99.1) shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CUREVAC N.V.

By: /s/ Franz-Werner Haas, LLD, LLM

Chief Executive Officer

Date: November 2, 2020

EXHIBIT NO. DESCRIPTION

99.1 CureVac N.V. Press Release dated November 2, 2020.



CureVac Reports Positive Interim Phase 1 Data for its COVID-19 Vaccine Candidate, CVnCoV

- Balanced immune response with strong induction of binding, and neutralizing antibodies and first indications of T cell activation
- · Quality of immune response comparable to recovered COVID-19 patients, closely mimicking immune response after natural COVID-19 infection
- · CVnCoV generally well tolerated across tested dose range of 2-12µg
- Data support 12µg dose for pivotal Phase 2b/3 clinical trial
- On track to initiate pivotal Phase 2b/3 before end of 2020

TÜBINGEN, Germany/ BOSTON, USA – November 2, 2020 – CureVac N.V. (Nasdaq: CVAC), a clinical-stage biopharmaceutical company developing a new class of transformative medicines based on messenger ribonucleic acid ("mRNA"), today announced positive interim data from its ongoing Phase 1 dose-escalation study evaluating the safety, reactogenicity and immunogenicity of CVnCoV, its investigational SARS-CoV-2 vaccine candidate. The vaccine candidate was generally well tolerated across all tested doses (2-12µg) and induced strong binding and neutralizing antibody responses in addition to first indication of T cell activation. CureVac intends to provide a detailed Phase 1 data overview and publication in a scientific journal in the coming weeks. CVnCoV is currently also being investigated in a Phase 2a clinical trial in older adults in Peru and Panama.

"We are very encouraged by the interim Phase 1 data. It represents a critical milestone in our COVID-19 vaccine program and strongly supports the advancement of our vaccine candidate," said **Dr. Franz-Werner Haas, Chief Executive Officer of CureVac**. "Following further data readouts and discussion with regulatory authorities, we remain fully committed and on track to initiate a pivotal Phase 2b/3 trial before the end of 2020."

The Phase 1 study has enrolled to date more than 250 healthy individuals aged 18 to 60 years. Individuals were vaccinated intramuscularly with CVnCoV at escalating dose levels of 2, 4, 6, 8 and 12µg on days 1 and 29. Per dose level, the trial included up to 10 participants who had previously tested positive for a COVID-19 infection (seropositives) to further evaluate the safety and immunogenicity of CVnCoV in this sub-population.

The data support the decision to advance the 12µg dose in the upcoming pivotal Phase 2b/3 study.

Immunogenicity data showed induction of binding antibody titers, translating into titers of virus neutralizing antibodies at all tested dose levels. Geometric Mean Titers (GMTs) of binding and neutralizing antibodies of study participants were compared to peak serum titers of 67 symptomatic convalescent COVID-19 patients (human convalescent sera, or HCS). The applied HCS panel was composed to provide a medically relevant comparator to validate CVnCoV potency. The panel was highly representative of the immune activation of seriously ill patients with multiple symptoms of whom approximately 24% were hospitalized. At $12\mu g$, GMTs of binding antibodies increased to the level measured in the HCS panel. Virus neutralizing antibodies increased to HCS levels at $12\mu g$ and were measured in a live-virus micro-neutralization assay. Analysis of T cell mediated immunity is ongoing. Early data show indications of functional T cells confirming activation of cellular immune response.

"These initial data show a robust and highly efficient immune response to our natural mRNA-based CVnCoV vaccine candidate, including antibody and initial T cell responses at the level of a relevant panel of symptomatic convalescent patients," said **Dr. Mariola Fotin-Mleczek, Chief Technology Officer of CureVac**. "We are grateful to all study volunteers who are helping to enable the development of a vaccine that will provide the best possible protection for people."

CVnCoV's unique mode of action mimics the natural immune response to the infection observed in recovered COVID-19 patients. This is reflected in the relative proportion of neutralizing to binding antibody levels, which are similar in vaccinated individuals and convalescent patients.

"The data are highly encouraging," said **Prof. Dr. Peter Kremsner, Director of the Institute of Tropical Medicine of the University of Tübingen and lead investigator of the Phase 1 trial**. "In this accelerated development program, it is paramount to ensure safety while generating a favorable level of immunogenicity. With this study, we had a strong focus on identifying the optimal dose for CVnCoV and we have succeeded in that."

Reactogenicity of CVnCoV was continuously monitored by a Data and Safety Monitoring Board, and the vaccine was generally well tolerated across all tested doses. No related serious adverse events were observed. At $12\mu g$, grade 3 adverse events occurred mostly after administration of the second dose and included fatigue, headache, chills, muscle pain, and to a lesser extent, fever. All reported events were transient and resolved rapidly, usually within 24 to 48 hours.

Formulation of CVnCoV is based on state-of-the-art lipid nanoparticle (LNP) technology licensed from CureVac's long-standing partner Acuitas Therapeutics.

About CVnCoV

CureVac began development of its mRNA-based COVID-19 vaccine candidate in January 2020. The compound is an optimized, non-chemically modified mRNA, encoding the prefusion stabilized full-length spike protein of the SARS-CoV-2 virus. The Phase 1 clinical study of CVnCoV began in June 2020 at clinical study centers in Germany and Belgium in collaboration with the Coalition for Epidemic Preparedness Innovation (CEPI). At the end of September 2020 CVnCoV entered a Phase 2a clinical trial in Peru and Panama, extending clinical studies into older adults and regions with high-incidence of COVID-19 infections. CureVac plans to initiate a pivotal Phase 2b/3 clinical study by the end of 2020. Clinical trial material is provided by the company's substantial production capacities for mRNA vaccines at its headquarters in Tübingen. The company is currently expanding those manufacturing capacities to allow for broad-scale manufacturing of CVnCoV for potential commercial supply preparedness.

About CureVac

CureVac is a global clinical-stage biopharmaceutical company in the field of messenger RNA (mRNA) technology, with more than 20 years of expertise in developing and optimizing the versatile biological molecule for medical purposes. The principle of CureVac's proprietary technology is the use of nonchemically modified mRNA as a data carrier to instruct the human body to produce its own proteins capable of fighting a broad range of diseases. Based on its proprietary technology, the company has built a deep clinical pipeline across the areas of prophylactic vaccines, cancer therapies, antibody therapies, and the treatment of rare diseases. CureVac had its initial public offering on the New York Nasdaq in August 2020. It is headquartered in Tübingen, Germany, and employs approximately 500 people at its sites in Tübingen, Frankfurt, and Boston, USA. Further information can be found at www.curevac.com.

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Forward-Looking Statements

This press release contains statements that constitute "forward looking statements" as that term is defined in the United States Private Securities Litigation Reform Act of 1995, including statements that express the opinions, expectations, beliefs, plans, objectives, assumptions or projections of CureVac (the "company") regarding future events or future results, in contrast with statements that reflect historical facts. Examples include discussion of the company's strategies, financing plans, growth opportunities and market growth. In some cases, you can identify such forward-looking statements by terminology such as "anticipate," "intend," "believe," "estimate," "plan," "seek," "project," or "expect," "may," "will," "would," "could," "potential," "intend," or "should," the negative of these terms or similar expressions. Forward-looking statements are based on management's current beliefs and assumptions and on information currently available to the company. However, these forward-looking statements are not a guarantee of the company's performance, and you should not place undue reliance on such statements. Forward-looking statements are subject to many risks, uncertainties and other variable circumstances, including negative worldwide economic conditions and ongoing instability and volatility in the worldwide financial markets, ability to obtain funding, ability to conduct current and future preclinical studies and clinical trials, the timing, expense and uncertainty of regulatory approval, reliance on third parties and collaboration partners, ability to commercialize products, ability to manufacture any products, possible changes in current and proposed legislation, regulations and governmental policies, pressures from increasing competition and consolidation in the company's industry, the effects of the COVID-19 pandemic on the company's business and results of operations, ability to manage growth, reliance on key personnel, reliance on intellectual property protection, ability to provide for patient safety, and fluctuations of operating results due to the effect of exchange rates or other factors. Such risks and uncertainties may cause the statements to be inaccurate and readers are cautioned not to place undue reliance on such statements. Many of these risks are outside of the company's control and could cause its actual results to differ materially from those it thought would occur. The forward-looking statements included in this press release are made only as of the date hereof. The company does not undertake, and specifically declines, any obligation to update any such statements or to publicly announce the results of any revisions to any such statements to reflect future events or developments, except as required by law.

For further information, please reference the company's reports and documents filed with the U.S. Securities and Exchange Commission (SEC). You may get these documents by visiting EDGAR on the SEC website at www.sec.gov.