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 June 2023

Commission File Number: 001-39446

CureVac N.V.

(*Exact Name of Registrant as Specified in Its Charter*)

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

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 ☐

On June 20, 2023, CureVac N.V. (the “Company”) issued a press release announcing that the first participant was dosed with its investigational cancer vaccine CVGBM in a Phase 1 study. A first data readout is expected in the second half of 2024.

The information included in this Form 6-K (including Exhibit 99.1, but excluding the statements of the Company’s Chief Development Officer contained in Exhibit 99.1 hereto) is hereby incorporated by reference into the Company’s Registration Statement on Form F-3 (File No. 333-259613).

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/ Alexander Zehnder
Chief Executive Officer

Date: June 20, 2023

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	CureVac N.V. Press Release dated June 20, 2023.

Exhibit 99.1

CureVac Doses First Patient in Phase 1 Study of Cancer Vaccine Candidate for Surgically Resected Glioblastoma

- Cancer vaccine candidate CVGBM utilizes single mRNA, encoding eight epitopes of tumor-associated antigens with demonstrated relevance in glioblastoma
- Study designed to evaluate safety and immunogenicity in patients with glioblastoma after surgical resection and radiotherapy
- First study to apply CureVac's second-generation mRNA backbone in oncology

TÜBINGEN, Germany / BOSTON, USA – June 20, 2023 – CureVac N.V. (Nasdaq: CVAC) ("CureVac"), a global biopharmaceutical company developing a new class of transformative medicines based on messenger ribonucleic acid ("mRNA"), today announced that it has dosed the first patient with its investigational cancer vaccine CVGBM in a Phase 1 study. CVGBM is based on CureVac's proprietary second-generation mRNA backbone and features a single mRNA, encoding eight epitopes derived from known tumor-associated antigens with demonstrated relevance in glioblastoma. A first data readout is expected in the second half of 2024.

"We are excited to enter the execution phase of our cancer vaccine development strategy with a study that is designed to establish proof-of-principle for our advanced second-generation mRNA backbone in oncology," said Dr. Myriam Mendila, Chief Development Officer of CureVac. "We will use the study data to evaluate the ability of our second-generation mRNA backbone to raise strong tumor-directed immune responses and provide a firm foundation to further advance our oncology pipeline based on our potent vaccine platform and an unparalleled framework for antigen discovery."

The open-label study evaluates the safety and tolerability of CVGBM in patients with newly diagnosed and surgically resected MGMT-unmethylated glioblastoma or astrocytoma with a molecular signature of glioblastoma. CVGBM is administered as a monotherapy after surgical resection and completion of radiotherapy with or without chemotherapy. The study will consist of two parts, a dose-escalation part (Part A) and a dose-expansion part (Part B). In the initiated Part A, patients will receive a total of seven intramuscular administrations of CVGBM at escalating doses in the range of 12 to 100 µg on days 1, 8, 15, 29, 43, 57, and 71. In patients without disease progression, vaccinations can continue beyond day 71 every 6 weeks up until one year after the first CVGBM vaccination, disease progression or undue toxicity.

About CVGBM

CVGBM is CureVac's first investigational cancer vaccine based on its proprietary second-generation mRNA backbone designed for improved mRNA translation and increased as well as extended protein expression. It encodes a single fusion protein comprising eight epitopes derived from tumor-associated antigens (TAA) with relevance in glioblastoma, including HLA class I epitopes presented on HLA A201 and class II epitopes. The applied epitopes have been previously shown to induce immune responses in glioblastoma patients when administered as peptide vaccines with adjuvants. CVGBM applies unmodified mRNA and is formulated within lipid nanoparticles (LNPs). The Phase 1 proof-of-principle study of CVGBM is currently being conducted in Germany, Belgium and the Netherlands.

CureVac Media and Investor Relations Contact

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About CureVac

CureVac (Nasdaq: CVAC) is a global biopharmaceutical company in the field of messenger RNA (mRNA) technology, with more than 20 years of expertise in developing, optimizing, and manufacturing this versatile biological molecule for medical purposes. The principle of CureVac's proprietary technology is the use of optimized mRNA as a data carrier to instruct the human body to produce its own proteins capable of fighting a broad range of diseases. In July 2020, CureVac entered in a collaboration with GSK to jointly develop new products in prophylactic vaccines for infectious diseases based on CureVac's second-generation mRNA technology. This collaboration was later extended to the development of second-generation COVID-19 vaccine candidates, and modified mRNA vaccine technologies. Based on its proprietary technology, CureVac has built a deep clinical pipeline across the areas of prophylactic vaccines, cancer therapies, antibody therapies, and the treatment of rare diseases. CureVac N.V. has its headquarters in Tübingen, Germany, and has more than 1,100 employees across its sites in Germany, the Netherlands, Belgium, Switzerland and the U.S. Further information can be found at www.curevac.com.

Forward-Looking Statements CureVac

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 N.V. and/or its wholly owned subsidiaries CureVac SE, CureVac Manufacturing GmbH, CureVac Inc., CureVac Swiss AG, CureVac Corporate Services GmbH, CureVac RNA Printer GmbH, CureVac Belgium SA and CureVac Netherlands B.V. (the "company") regarding future events or future results, in contrast with statements that reflect historical facts. Examples include statements regarding the completion, size and terms of the proposed public offering. 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.