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 August 2024

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 August 15, 2024, CureVac N.V. (the "Company") issued a press release announcing the start of the dose-confirmation Part B of its ongoing Phase 1 study in patients with resected glioblastoma.

The information included in this Form 6-K (including Exhibit 99.1, but excluding the statements of the Company's Chief Scientific 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: August 15, 2024

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	CureVac N.V. Press Release dated August 15, 2024

CureVac Advances Cancer Vaccine Candidate CVGBM to Part B of Phase 1 Study in Patients with Resected Glioblastoma

- First patient administered in dose-confirmation Part B of Phase 1 study with mRNA-based, multiepitope cancer vaccine candidate CVGBM
- Part B expected to include up to 20 patients to generate extended data on safety, tolerability, and immunogenicity of CVGBM

TÜBINGEN, Germany/BOSTON, USA – August 15, 2024 – 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 the start of the dose-confirmation Part B of its ongoing Phase 1 study in patients with resected glioblastoma. CVGBM is CureVac's first investigational cancer vaccine based on its proprietary second-generation mRNA backbone. It encodes a single fusion protein comprising eight epitopes with demonstrated immunogenicity in glioblastoma.

"After successful completion of the dose-escalation part A of this clinical study with CVGBM, the dose expansion part B is important to confirm that we have selected the appropriate dose based on safety and immunogenicity for further studies in patients suffering from glioblastoma," said Dr. Myriam Mendila, Chief Scientific Officer of CureVac. "Importantly, the review by the Data Safety Monitoring Board confirmed there have been no dose-limiting toxicities to date in Part A with the four doses tested, and have enabled us to move forward to this next part of the study."

The open-label study is evaluating 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 consists of two parts, a dose-escalation part (Part A) and a dose-expansion part (Part B). Part A has successfully been completed and involved 16 patients, testing doses in the range of 12 to 100 µg. A review of the safety data from Part A by the Data Safety Monitoring Board (DSMB) confirmed no dose-limiting toxicities. A 100 µg dose was recommended for Part B of the study.

Initial data on the dose-escalation Part A will be presented in an oral presentation at the European Society for Medical Oncology Congress (ESMO) on September 13, 2024.

More information can be found at clinicaltrials.gov (NCT05938387).

About CVGBM

Based on CureVac's proprietary second-generation mRNA backbone, designed for improved mRNA translation and increased as well as extended protein expression, CVGBM 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 A0201 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.

About CureVac

CureVac (Nasdaq: CVAC) is a pioneering multinational biotech company founded in 2000 to advance the field of messenger RNA (mRNA) technology for application in human medicine. In more than two decades of developing, optimizing, and manufacturing this versatile biological molecule for medical purposes, CureVac has introduced and refined key underlying technologies that were essential to the production of mRNA vaccines against COVID-19, and is currently laying the groundwork for application of mRNA in new therapeutic areas of major unmet need. CureVac is leveraging mRNA technology, combined with advanced omics and computational tools, to design and develop off-the-shelf and personalized cancer vaccine product candidates. It also develops programs in prophylactic vaccines and in treatments that enable the human body to produce its own therapeutic proteins. Headquartered in Tübingen, Germany, CureVac also operates sites in the Netherlands, Belgium, Switzerland, and the U.S. Further information can be found at www.curevac.com.

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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 discussion of the potential efficacy of the company's vaccine and treatment candidates and the company's strategies, financing plans, cash runway expectations, 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, fluctuations of operating results due to the effect of exchange rates, delays in litigation proceedings, different judicial outcomes 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.