CureVac's COVID-19 Vaccine Candidate, CVnCoV, Demonstrates Protection Against SARS-CoV-2 B.1.351 Variant (South African Variant) in Preclinical Challenge Study

- *First challenge infection study in preclinical mouse model to provide evidence for protection against SARS-CoV-2 variant*
- *CVnCoV induces robust antibody titers with virus variant neutralizing capacity in immunized animals*
- *Full protection of immunized mice from infection and mortality during variant challenge infection*

TÜBINGEN, Germany/ BOSTON, USA – March 23, 2021 – CureVac N.V. (Nasdaq: CVAC), a global biopharmaceutical company developing a new class of transformative medicines based on messenger ribonucleic acid (mRNA), today announced the publication of preclinical data demonstrating that their COVID-19 vaccine candidate, CVnCoV, protects against challenge infections with the SARS-CoV-2 Variant of Concern B.1.351 (also referred to as the "South African" variant) and a strain of the original SARS-CoV-2 B1 lineage (BavPat1) in a transgenic mouse model. Consistent with available variant studies, the neutralization capacity of robust antibody titers was shown to be impacted by the B.1.351 variant compared to the original strain. However, vaccinated animals were fully protected from lethal challenge infections with both strains. The full manuscript of the preclinical data is available on the bioRxiv preprint server.

"Emergence of new SARS-CoV-2 strains, which exhibit the potential to escape an existing SARS-CoV-2 immunity, pose an increasing risk to the progress of current global immunization efforts," said Igor Splawski, Ph.D., Chief Scientific Officer of CureVac. "To our knowledge, this is the first challenge study in a human ACE2 transgenic mouse model of severe disease that shows complete protection against one of the most threatening virus variants."

Within the study, transgenic mice expressing the human ACE2 receptor, the receptor through which SARS-CoV-2 enters human cells, were immunized with 8µg of CVnCoV per dose, following a two-dose vaccination schedule at day 0 and day 28. Vaccination resulted in robust antibody responses and complete protection (100% survival) against the original SARS-CoV-2 strain and also B.1.351 (variant strain first identified in South Africa) challenge infections. CVnCoV vaccination efficiently blocked viral replication of B.1.351 in the lower respiratory tract and brain, and reduced viral replication in the upper respiratory tract in vaccinated and challenged animals.

About CVnCoV

CureVac began development of its mRNA-based COVID-19 vaccine candidates in January 2020. The vaccine candidate chosen first for clinical development, CVnCoV, is an optimized, non-chemically modified mRNA, encoding the prefusion stabilized full-length spike protein of the SARS-CoV-2 virus, and formulated within Lipid Nanoparticles (LNPs). Phase 1 and 2a clinical trials of CVnCoV began in June and September 2020, respectively. Phase 1 interim data reported in November 2020 showed that CVnCoV was generally well tolerated across all tested doses and induced strong antibody responses in

addition to first indication of T cell activation. The quality of immune response was comparable to recovered COVID-19 patients, closely mimicking the immune response after natural COVID-19 infection. In December 2020, CureVac initiated a pivotal Phase 2b/3, the HERALD study, with a 12µg dose of CVnCoV. In February 2021, CureVac initiated a rolling submission with the European Medicines Agency (EMA) for CVnCoV.

CureVac has entered into several strategic partnerships for the further development, production and commercialization of CVnCoV. The company entered into a collaboration agreement with Bayer in January 2021 with regards to CureVac´s current vaccine candidate CVnCoV. In February 2021, CureVac and the British pharmaceutical company GlaxoSmithKline (GSK) agreed to jointly develop next-generation multi-valent mRNA vaccines against COVID-19. The development of new vaccine candidates is strengthened by a partnership with the UK Government and its Vaccines Taskforce, which CureVac also entered in February 2021. GSK will also potentially contribute to this collaboration. Clinical trial and commercial material is provided by the company's substantial production capacities for mRNA vaccines at its headquarters in Tübingen, supported by the current expansion of manufacturing capacities in Europe, allowing broad-scale manufacturing of CVnCoV for potential commercial supply preparedness.

About CureVac

CureVac is a global 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 non-chemically 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 more than 600 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 potential efficacy of the company’s vaccine and treatment candidates and 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