

CureVac Conference Call, April 25, 2023

# Fourth Quarter and Full-Year 2022 Financial Results and Business Updates

# Presenters

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Pierre Kemula	Chief Financial Officer
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### SARAH FAKIH

Thank you. Good morning, good afternoon and welcome to our conference call. My name is Sarah Fakih, and I'm the Vice President of Corporate Communications and Investor Relations at CureVac.

Please let me introduce today's speakers.

On the call with me from CureVac are Alexander Zehnder, Chief Executive Officer of CureVac; Myriam Mendila, our Chief Development Officer; and Pierre Kemula, Chief Financial Officer of CureVac.

Please note that this call is being webcast live and will be archived on the Events and Presentations section under Investor Relations on our website.

Before we begin, a few forward-looking statements. The discussion and responses to your questions on this call reflect management's view as of today, Tuesday, April 25, 2023. We will be making statements and providing responses to your questions that state our intentions, beliefs, expectations or predictions of the future. These constitute forward-looking statements for the purpose of the safe harbor provisions.

These statements involve risks and uncertainties that could cause actual results to differ, materially, from those projected. CureVac disclaims any intention or obligation to revise any forward-looking statements. For more information, please refer to our filings with the U.S. Securities and Exchange Commission.

I will now turn the call over to Alexander.

# **ALEXANDER ZEHNDER**

Thank you, Sarah. Ladies and gentlemen, good morning, good afternoon to everybody on the webcast.

On April 1 this year, I took over the leadership of CureVac, the pioneer in mRNA technology and the company that is at an inflection point, transforming from a research-oriented biotech to a fully integrated commercial biopharma company.

Positive preliminary clinical data in our prophylactic vaccines area reported earlier this year have demonstrated the great potential of our proprietary mRNA platform. This critical milestones opens the door for CureVac to explore new opportunities in the development of effective vaccines and therapeutics, and we are now entering a new chapter of our corporate evolution.

So, I'm really thrilled to bring my strategic vision and strong operational and commercial experience to CureVac at this pivotal moment for the company.

Please let me take the opportunity to briefly introduce myself. I'm a medical doctor by training and have worked in the pharmaceutical industry for more than 20 years across different companies, culture, disease areas, in roles of increasing complexity and responsibility.

I had the great fortune to learn and grow in positions held at industry stalwarts such as Roche, Genentech and Sanofi in product strategy and commercially focused positions, across multiple business units and functional areas.

Most recently, before joining CureVac, I led the global oncology franchise at Sanofi. I was responsible for shaping one of the company's key future growth drivers, rebuilding the product pipeline, launching new medicines, strengthening in the organization and representing the company.

And I am convinced that my experience in bringing practice-changing medicines to the market, building pipelines and shaping organization will be of great benefit, as we take CureVac to the next level as a relevant commercial player. And I'm really honored to pursue this mission in collaboration with all our RNA people, as well as my colleagues from the CureVac management team, which was strengthened in February this year by the addition of Myriam Mendila as our Chief Development Officer.

So, before I go into the quarterly review, I would also like to give Myriam the opportunity to briefly introduce herself.

### MYRIAM MENDILA

Thank you, Alexander, and a warm welcome to everyone on the conference call. I'm really excited to have joined the exceptional CureVac team at this decisive moment in the company's corporate development.

I come to CureVac with more than 20 years of global, regional and local experience and product development, medical affairs, pharmacovigilance and health care compliance, as well as commercial strategy at Roche, Genentech and Novartis.

Before joining CureVac, I was a Chief Medical Officer and Global Head of Medical Affairs Oncology at Novartis Pharma in Switzerland. In this role, I was accountable for the worldwide oncology medical affairs function and oversaw the development and also execution of the global medical strategy for the entire oncology product portfolio.

Furthermore, I ensured high standards in quality and compliance for all related medical activities, worldwide.

As a physician and throughout my entire career, I have been truly committed to making new treatments and therapies available to those who need them most and to do always what is right for the patient. By putting the patient at the center of everything we do, I'm convinced we can make the best decisions and develop the right therapies.

I believe that the mRNA technology is the next function medicine, and I'm really proud that, at CureVac, we have the opportunity to apply this technology and develop innovative therapies to support the fight for human health.

I look forward to putting my operational and strategic product development experience, as well as my skills and transformative competency development, to work for CureVac as we advance our mRNA product pipeline.

Let me now hand it back to Alexander.

# **ALEXANDER ZEHNDER**

Thank you, Myriam.

So, let's turn to Slide 6 and reflect on the key achievement for 2022. It was indeed a transformational year for CureVac, as the company made significant progress on various fronts: Validating our mRNA platform; strengthening our oncology capabilities, namely, in antigen discovery; driving the ongoing business transformation; further enhancing our seamless manufacturing capabilities; and importantly, maintaining a strong cash position that should take us well into 2025.

In clinical development, the primary goal for 2022 was achieved with the start of 4 Phase I clinical trials in COVID-19 and flu, in collaboration with our partner, GSK, which compares modified versus unmodified mRNA in both indications using our advanced second-generation backbone. In early '23, successful execution of this clinical development program led to a key achievement for CureVac, the validation of our second-generation mRNA technology platform, based on positive preliminary data reported for both indications.

The data demonstrated that modified mRNA technology offered better tolerability with a broader applicable dose range. Furthermore, we observed strong antibody induction starting at the lowest tested doses. These clinical insights from our prophylactic vaccine trials will provide an important basis to inform our development programs for oncology, where we significantly expanded our footprint in 2022 by acquiring Frame Cancer Therapeutics and partnering with myNEO.

This now gives us access to a state-of-the-art antigen discovery platform, which is expected to enable us to build a portfolio of novel cancer vaccine candidates. On a corporate level, we further broadened our operational bandwidth with growing the talent base in every area of the company. Two new CureVac sites were inaugurated in 2022, in Amsterdam and Brussels, stepping into the European biotech infrastructure, as well as the vaccine-specific talent pools.

Company-wide digitization continues to advance with a state-of-the-art ERP system to professionalize our processes, streamline our operations and increase efficiency. In manufacturing, the German Pandemic Preparedness Agreement reached in April '22 accelerated the buildup of our commercial grade GMP IV plant as a safeguard against future infectious disease outbreaks. GMP IV is expected to be operational in 2024. And this really puts us in a unique position to offer seamless, scalable manufacturing capacity from large commercial scale using our GMP IV facility, to small scale using the RNA printer, or highly automated system, for personalized cancer vaccines.

Looking at the financials, 2022 closed with a strong cash position of almost EUR 496 million, which benefited from effectively addressing the headwind from first-generation vaccine candidate commitments. In early '23, additional funds were secured to a highly successful capital raise providing us with \$250 million in gross proceeds. This extends our cash reach into mid-'25 and supports the execution of our strategic goals and priorities in 2023, and beyond. On Slide 7, we

have laid out the CureVac product development pipeline. This pipeline leverages our technology expertise in three therapeutic areas-prophylactic vaccines, oncology and molecular therapies.

In our most advanced area, prophylactic vaccines, pipeline expansion is driven by our clinically validated technology platform and our proprietary second-generation mRNA backbone. This backbone forms the basis for the 4 Phase I clinical trials we are currently running in COVID-19 and flu in collaboration with our partner, GSK. It will also be the basis for continued clinical development in these indications. The clinical insights, based on these trials, combined with our antigen-discovering capabilities gained through the acquisition of Frame Cancer Therapeutics, will support the buildup of a differentiated vaccine portfolio in cancer.

In the third therapeutic area, molecular therapies, we are developing optimized mRNA therapeutics, together with several collaboration partners, which are intended to address therapeutic proteins to treat rare and metabolic diseases. Here, we are currently advancing preclinical studies in the liver and the eye, as well as working on therapeutic antibodies.

In considering the broad spectrum of diseases with high unmet need, it is clear to me that mRNA technology has every potential to deliver practice-changing medicines and to revolutionize treatments in the years to come. Now let me go on to the key catalysts on Slide 8 that will drive our pipeline and 2023 goals. With the clinical validation of our mRNA technology platform, we have reached an important inflection point, and now our future success will depend on strong execution disciplines of our key catalysts in 2023.

The first priority is to deliver on clinical development programs for prophylactic vaccines in collaboration with GSK. We plan to initiate a Phase I/II study with a multivalent, modified flu construct in the second quarter of this year. And for COVID-19, we expect to start a Phase II trial using both a mono and bivalent modified construct, later in 2023. For oncology, we previously announced the plan to start two proof of principle studies in 2023, designed to validate and optimize our second-generation mRNA backbone for tumor-directed immune responses.

The first studies in patients with surgically resected glioblastoma is expected to start in the second quarter. Following a recent portfolio review, we decided not to do a second proof-of-concept study using a single antigen approach in melanoma, as previously communicated, but rather focus on fully leveraging our new antigen discovery capabilities with our second-generation mRNA backbone to bring a more differentiated state of the art cancer vaccine candidate addressing multiple novel antigens to the clinic.

This study will be conducted in combination with a checkpoint inhibitor and is expected to start in 2024.

And in molecular therapies, we generated preclinical data on an undiscussed indication in ocular diseases in collaboration with the Schepens Eye Research Institute in Boston. We expect the scientific publication in the second quarter of this year, followed by the selection of a candidate

for further clinical development. Last but not least, in manufacturing, we are driving innovation by leveraging the RNA printer, our automated solution for GMP-grade mRNA in oncology. Subject to regulatory approval, we expect the printer to obtain its first drug substance manufacturing license in the first half of 2023.

With this, let me now hand the call over to Myriam again for a more detailed update on our clinical development programs in prophylactic vaccines and oncology.

#### MYRIAM MENDILA

#### Thank you, Alexander.

So, on Slide 9, let me start with an overview of clinical development for our COVID-19 and flu vaccine programs, jointly developed with GSK.

With the preliminary data reported earlier this year, we identified a modified mRNA as the preferred technology for further clinical development in prophylactic vaccines for both indications. On the left, we summarize the currently ongoing studies, applying modified second-generation backbone construct, the monovalent flu SV mRNA study for flu at the top left, and the monovalent CV0501 study for COVID-19 at the bottom left. The final data readout for both studies are currently being finalized.

On the right side of the slide, you can see the upcoming studies Alexander mentioned in both indications. At the top right, a combined Phase I/II study for flu will be initiated with modified multivalent constructs, addressing all 4 WHO-recommended influenza strains. It will assess the safety, reactogenicity and also immunogenicity of the vaccine construct in healthy, younger and older adults versus a licensed comparator vaccine. The initial Phase I dose escalation part is expected to start shortly and will be conducted in the U.S. and Belgium.

For the upcoming COVID-19 study on the bottom right, a Phase II trial is expected to start later in 2023, with modified mono and bivalent mRNA construct addressing clinically relevant SARS-CoV-2 variants. The study will be conducted in healthy younger and older adults versus a licensed comparator vaccine at clinical sites in the U.S., Germany, Belgium and other countries. While the previously reported positive preliminary data for flu were already quite comprehensive, we would now like to provide an update on data from outstanding dose levels for the COVID-19 Phase I study. On Slide 10, let me walk you through updated preliminary reactogenicity, as well as immunogenicity data for CV0501 encoding the Omicron BA.1 variant.

The reactogenicity data illustrated on the left represents solicited adverse events within seven days after the booster vaccination in the younger adult group aged 18 to 64 years and older adult group aged greater or equal to 65 years. In younger adults, the presented data in the upper figure newly featured the previously unavailable dose groups of 3 and 6 micrograms. Both doses are

tested only in the younger adults. Here, one Grade 3 solicited adverse event occurred at 3 micrograms, which was reported to be fatigue. In older adults, the newly available data in 100 and 200 micrograms in the lower figure showed no Grade 3 solicited adverse events. Overall, the reactogenicity data of both age groups at the new tested dose levels are consistent with previously reported data and confirmed that CV0501 is generally well tolerated, across both age groups and all dose levels.

Antibody responses against the BA.1 variant across both age groups are shown as a geometric mean increase of antibody titers, or GMI in short, in the table to the right. The ratio of post to pre-boost due to rising antibody titers represent a boosting activity of CV0501.

Previously reported geometric mean increases of antibody titers at dose levels of 12 to 5 micrograms, ranged between seven and nine-fold for younger adults and between 13 and 21-fold for older adults, depending on the day when the data were measured. The new preliminary GMI data at 3 and 6 micrograms on day 15 confirm that CV0501 induces meaningful antibody responses, even at the lowest tested dose. Data at day 29 is currently being finalized. After this data update for the now completed dose range in the CV0501 study, we are not anticipating further updates before the final Phase I data in COVID-19 as well as flu become available.

With this, let me now shift gears and turn to our oncology area. On Slide 11, I would like to draw your attention, once again, to the strategy for continued expansion oncology, our next growth driver, which we are rapidly advancing, in addition to our progress in prophylactic vaccines. With the key achievements in 2022, we have acquired and assembled all components needed to succeed in oncology. We have a highly potent second-generation mRNA backbone that has clinically shown its ability to raise strong and tolerable immune responses in flu and COVID.

We have integrated a cutting-edge genomics and bioinformatics platform for the discovery of differentiated and new tumor antigens. We are rapidly progressing oncology enabling technologies, such as improved and dedicated lipid nanoparticle, or in short LNP, systems that are specifically enhancing T cell immune responses, which are most critical in oncology applications.

And finally, our scalable manufacturing enables the rapid and flexible availability of cancer vaccines from R&D to commercial scale, complemented by the RNA printer, which is expected to open new avenues for providing personalized mRNA-based cancer vaccines. Taken together, these elements provide the leverage we need to be successful in oncology. In 2023, a key deliverable will be to bring them together and kick off a broader portfolio of novel cancer vaccine candidates for off the shelf, as well as fully personalized therapies. To this end and as Alexander has already noted, our anticipated proof-of-principle study in up to 54 patients with surgically resected glioblastoma is well on track to be initiated in the second quarter of 2023. The Phase I dose escalation study will assess the safety and immunogenicity of our second-generation mRNA backbone construct, encoding for eight epitopes derived from tumor-associated antigens overexpressed in glioblastoma.

The trial will be conducted in Germany, Belgium and the Netherlands, and the first data readout is expected in the second half of 2024. With the successful study setup and manufacture of clinical trial material of the complex multi-epitope construct, we have already achieved important milestones to initiate the study. Now, the potency of an mRNA vaccine is a combination of the efficacy of the mRNA construct itself, as well as the LNP system that transports the mRNA to the cells. Therefore, our proprietary LNP research is an important enabler for our developments in prophylactic vaccines, as well as oncology. We previously reported a new LNP system consisting of a PEG-free lipid composition that showed highly localized distribution in the immune compartment, good cellular and tumoral immune responses in mice, as well as good room temperature stability as a dried presentation. Taking this research to the next level, we are now developing effective LNP systems that address specific requirements for efficient mRNA delivery for both prophylactic vaccines, as well as cancer vaccines. As implied on Slide 12, the requirements for LNP systems for prophylactic vaccines and cancer vaccines are different, illustrating the need for the development of application specific LNP systems. By prophylactic vaccines, vaccines should primarily induce tumoral responses, namely, strong induction of antibodies. For cancer vaccines, induction of tumor-killing T cells is critical. Prophylactic vaccines need to minimize reactogenicity as we are treating mostly healthy individuals.

Cancer vaccines need to activate signaling pathways in the cell for the strong induction of systemic immune responses in seriously ill patients. Activation of certain cytokines and chemokines in those signaling pathways can lead to higher reactogenicity but is really essential for the induction of a T cell response. And then lastly, as prophylactic vaccines represent a seasonal standard, they need to be stable enough for longer-term storage at refrigerator or even room temperature. For cancer vaccines, stability can be deprioritized in favor of stronger efficacy.

The most important finding in our LNP research is that the choice of lipids, their composition and concentration, allows us to tailor distinct immune responses to specific clinical settings. On Slide 13, you can see a data excerpt from comprehensive in vitro studies of selected LNP systems with varying lipid components and concentrations in human immune cells. Full data was presented at the European Molecular Biology Organization workshop in April this year. The figure on the left illustrates the comparison of different LNP systems and their ability to induce inflammatory cytokines, such as interferon IFN, IL6. The induction of inflammatory cytokines is an important indicator of a first response by the innate immune system and is absolutely critical in the cancer for the induction of a T cell response. Accordingly, the strong cytokine signals detected with LNP #3 and 4 on the left, are favorable characteristics for developing a cancer vaccine, but are less relevant in a prophylactic vaccine setting.

On the right side of the slide, you can see the corresponding activation of antigen-presenting immune cells, quantified via CD8 T as an activation marker. Activation of antigen-presenting immune cells is, again, relevant for the induction of a T cell response as, according to published literature, there appears to be a correlation between the amount of activated antigen presenting cells and the abundance of CD8-positive T cells. So, the strong induction of cytokine signaling

pathways and corresponding activation of antigen-presenting cells in LNP #3 and 4, again, represent essential characteristics needed for the design of a cancer vaccine. Our studies also generated comprehensive in vivo data in mice, not shown here, which further demonstrate our ability to design specific LNP systems that enable us to endure tailored immune responses for specific applications. We consider our tailored LNP design a critical complementary technology with the potential to further improve the efficacy, safety and stability of our mRNA platform and differentiate our development pipeline.

With this, let me hand back the call to Alexander.

# ALEXANDER ZEHNDER

Thank you, Myriam.

Looking at manufacturing, our manufacturing landscape outlined on Slide 14 shows how we can rapidly provide mRNA designs to, seamlessly, shift across the entire spectrum of large-scale manufacturing for pandemic preparedness, as well as innovative small-scale manufacturing for personalized vaccines using our RNA printer. CureVac is one of the few companies in the RNA space that has true end-to-end capabilities from technology, development and manufacturing, offering maximum flexibility, speed and scalability.

And with this, let me hand over to Pierre for a review of the financial data.

# PIERRE KEMULA

Thank you, Alexander.

Good morning and good afternoon to everyone on the call.

2022 has been a year of transformation as we manage commitments related to a first-generation vaccine candidate and finance in R&D, manufacturing and corporate milestones. We closed 2022 with a solid cash position of EUR 495.8 million. This cash position was strengthened in February this year by an additional \$250 million in gross proceeds from a successful capital raise. With these additional funds, based on the issuance of approximately 27 million common shares, we were able to extend our cash runway until mid-2025 and to diversify our investor base with new health care-specialized investors. We established an aftermarket, or ATM facility, in September 2021 to provide us with the option to offer shares worth up to a total of \$600 million, over a period of several years. So far, we have already raised approximately \$84 million.

In 2023, our solid cash position will allow us to fund the advancement of our mRNA technology platform and further the development of our pipeline. Looking at the cash position on Slide 16, as already mentioned, we closed 2022 with EUR 495.8 million. Cash used in operations was mainly allocated to capital expenditures for our new production facility, GMP IV, purchases for R&D

materials and settling of contract as part of the wind-down activities for the first-generation CVnCoV vaccine program.

Financial statements reflect CureVac's transition out of its previous exposure to CVnCoV.

Moving on to the profit and loss statements, revenues decreased by EUR 29.5 million to EUR 11.7 million for the fourth quarter of 2022 and decreased by EUR 35.6 million to EUR 67.4 million for the full year of 2022, compared to the same period in 2021. The decrease, year-on-year, was primarily driven by higher 2021 revenues related to the termination of the Boehringer Ingelheim collaboration and the subsequent recognition of EUR 26 million in late 2021. Revenue from our two GSK collaborations decreased, year-on-year, by EUR 12 million and amounted to a total of EUR 62.3 million in 2022, compared to EUR 74.3 million in the previous year, as the company is focused on the lead programs, flu and COVID. In the first quarter of 2022, we received a EUR 10 million milestone payment related to the start of the seasonal influenza clinical trial, of which EUR 6.3 million were recognized as revenues in 2022. Operating loss was EUR 121.5 million for the fourth quarter of 2022, representing EUR 116 million increase, compared to the same quarter of 2021. In the fourth quarter of 2021, we had recognized significant income from the release of governmental contract liabilities related to the upfront payment from the European Commission and the grant from the German Federal Ministry of Education and Research, or BMBF, amounting to a total of EUR 574.5 million. No such income was recognized in 2022.

For the full year of 2022, operating loss was EUR 249.5 million, representing EUR 162.8 million decrease, year-over-year. The operating results was affected by several key drivers. Cost of sales decreased primarily due to the lower expenses for CMO services. Prior year 2021 was highly impacted by significant expenses for the setup of a European CMO network for CVnCoV, also including recognition of liabilities associated to the wind down of these contracts. This was partially offset in 2022, but increasing write-off raw material, no longer expected to be used following the transfer to another party of reserve production capacity at the CMO. R&D expenses decreased year-on-year, primarily due to significantly lower development expenses related to the completion of the large Phase IIb/III clinical trials for CVnCoV.

Additionally, 2022 R&D costs were positively impacted by two elements amounting to EUR 63.6 million.

- A) In line with the declining number of continuing study participants and renegotiation of existing contracts, both in 2022, our remaining clinical cost estimate decreased, resulting in the reversal of EUR 38.5 million from the provision reported as of December 2021. This decrease was partially offset by the increase in material consumed in R&D.
- B) R&D costs were positively impacted by a net gain from a change in the estimate of CMO contract termination provisions for EUR 25.1 million following the transfer to another party of reserve production capacity at the CMO.

Other income decreased but was positively impacted by EUR 32.5 million from another party for reimbursement of prepayment and production activity set up at the CMO. In 2021, other income was primarily attributable to amounts recognized from grants from the BMBF. Financial results decreased by EUR 8.2 million to a loss of EUR 7.2 million for the fourth quarter of 2022, an increase by EUR 0.5 million to a profit of EUR 0.3 million for the full year 2022, compared to the same period in 2021. They were driven by foreign exchange impacts and interest on investments-cash investments. Pretax losses were EUR 128.7 million for the fourth quarter of 2022 and EUR 249.2 million for the 12 months of 2022.

With this, I would like to hand back the call to Alexander for the summary of any key messages.

# ALEXANDER ZEHNDER

Thank you, Pierre.

As the pioneer of mRNA technology, CureVac has entered next chapter in its transformation from a research-oriented biotech company to a fully integrated commercial biopharma company. In 2022, we significantly accelerated the pace of our development and achieved key milestones with the initiation of comprehensive clinical programs in COVID and flu and the integration of a highly differentiated antigen discovery platform.

In 2023, we are taking the next critical steps. Together with our partner, GSK, we are committed to advance and execute our clinical programs with the highest level of rigor and efficiency to bring safe and efficacious vaccines to people. The next clinical studies in COVID and flu are well on track to be initiated, this year. We're also well on track to initiate the first proof-of-principle study in oncology in the second quarter, leveraging our second-generation mRNA backbone.

Our strong cash position of EUR 495.8 million at the end of 2022 was reinforced by a successful financing round, earlier this year. It confirmed the broad confidence in the potential of our unique end-to-end mRNA capabilities, supported by a strong IP position, and it extends our cash reach into mid-2025 and supports the execution of our 2023 priorities, and beyond.

And with this, I would like to conclude our presentation, and we'll now open the webcast to your questions.

# SARAH FAKIH

With this, we would like to conclude this conference call. Thank you very much for your participation. Stay safe, and please don't hesitate to contact us should you have any further questions.

Thank you, and goodbye.