BIONTECH

Annual General Meeting

May 25, 2023

English Convenience Translation: German language is the official version.



MANAGEMENT REPORT AGENDA NO. 1

-	

Operations Development 2022 / Q1 2023 and Operations Outlook 2023 Prof. Dr. Ugur Sahin, Chief Executive Officer & Founder

Financial Development 2022 / Q1 2023 and Financial Outlook 2023 Jens Holstein, Chief Financial Officer



Operations Development 2022 & Q1 2023 and Operations Outlook 2023

Prof. Dr. Ugur Sahin, CEO & Founder



This Slide Presentation Includes Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, but not limited to, statements concerning: BioNTech's expected revenues and net profit related to sales of BioNTech's COVID-19 vaccine, referred to as COMIRNATY® where approved for use under full or conditional marketing authorization, in territories controlled by BioNTech's collaboration partners, particularly for those figures that are derived from preliminary estimates provided by BioNTech's partners: the rate and degree of market acceptance of BioNTech's COVID-19 vaccine and, if approved, BioNTech's investigational medicines; the initiation, timing, progress, results, and cost of BioNTech's research and development programs, including those relating to additional formulations of BioNTech's COVID-19 vaccine, and BioNTech's current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work and the availability of results; and BioNTech's estimates of commercial and other revenues, cost of sales, research and development expenses, sales and marketing expenses, general and administrative expenses, capital expenditures, income taxes, and shares outstanding. In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this presentation are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, many of which are beyond BioNTech's control, and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to: BioNTech's pricing and coverage negotiations with governmental authorities, private health insurers and other third-party payors after BioNTech's initial sales to national governments; the future commercial demand and medical need for initial or booster doses of a COVID-19 vaccine; competition from other COVID-19 vaccines or related to BioNTech's other product candidates, including those with different mechanisms of action and different manufacturing and distribution constraints, on the basis of, among other things, efficacy, cost, convenience of storage and distribution, breadth of approved use, side-effect profile and durability of immune response; the timing of and BioNTech's ability to obtain and maintain regulatory approval for BioNTech's product candidates; the ability of BioNTech's COVID-19 vaccine to prevent COVID-19 caused by emerging virus variants; BioNTech's and its counterparties' ability to manage and source necessary energy resources; BioNTech's ability to identify research opportunities and discover and develop investigational medicines; the ability and willingness of BioNTech's third-party collaborators to continue research and development activities relating to BioNTech's development candidates and investigational medicines; the impact of the COVID-19 pandemic on BioNTech's development programs, supply chain, collaborators and financial performance; unforeseen safety issues and claims for potential personal injury or death arising from the use of BioNTech's COVID-19 vaccine and other products and product candidates developed or manufactured by BioNTech's BioNTech's and its collaborators' ability to commercialize and market BioNTech's COVID-19 vaccine and, if approved, its product candidates; BioNTech's ability to manage its development and expansion; regulatory developments in the United States and foreign countries; BioNTech's ability to effectively scale BioNTech's production capabilities and manufacture BioNTech's products, including BioNTech's target COVID-19 vaccine production levels, and BioNTech's product candidates, risks relating to the global financial systems and markets; and other factors not known to BioNTech at this time. You should review the risks and uncertainties described under the heading "Risk Factors" in BioNTech's report on Form 6-K for the period ended March 31, 2023 and in subsequent filings made by BioNTech with the SEC, which are available on the SEC's website at https://www.sec.gov/. Except as required by law, BioNTech disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this presentation in the event of new information, future developments or otherwise. These forward-looking statements are based on BioNTech's current expectations and speak only as of the date hereof.



Safety Information

COMIRNATY® **V**(the Pfizer-BioNTech COVID-19 vaccine) has been granted standard marketing authorization (MA) by the European Commission to prevent coronavirus disease 2019 (COVID-19) in the population aged 6 months and older. In people from 5 years of age and older the vaccine is administered as a 2-dose series, 3 weeks apart. Adults and adolescents from the age of 12 are given 30 micrograms per dose; children aged 5 to 11 years are given 10 micrograms per dose. There is a pediatric formulation containing 3 micrograms per dose available for infants and children 6 months to 4 years of age. In this age group, COMIRNATY can be given as primary vaccination consisting of three doses (of 3 micrograms per dose; children aged 5 to 11 years are given 10 micrograms per dose. In addition, the MA has been expanded to include a booster dose of COMIRNATY 10 micrograms may be given to children from 5 to 11 years of age and older. A booster dose of COMIRNATY 10 micrograms may be given to children from 5 to 11 years of age and older. A booster dose of ZoMIRNATY 10 micrograms may be given to children from 5 to 11 years of age at least 6 months after the primary vaccination course. A third primary course dose may be advent dose to people aged 5 years and older with a severely weakened immune system. The European Medicines Agency's (EMA's) Committee for Medicinal Products for Human Use (CHMP) has completed its rigorous evaluation of COMIRNATY concluding by consensus that sufficiently robust data on the quality, safety and efficacy of the vaccine are now available. **COMIRNATY® V(the Pfizer-BioNTech COVID-19 vaccine), Bivalent: COMIRNATY Original/Omicron BA.4-5** In addition, COMIRNATY has also been granted standard MA for two Omicron subvariant adapted vaccines: COMIRNATY Original/Omicron BA.4-5 In addition, COMIRNATY has also been granted standard MA for two Omicron BA.4/56 (30 micrograms per dose) may be administered as a booster in people aged 12 years and older who have received at least a months between administered as a booster

IMPORTANT SAFETY INFORMATION:

- · Events of anaphylaxis have been reported. Appropriate medical treatment and supervision should always be readily available in case of an anaphylactic reaction following the administration of the vaccine.
- There is an increased, but very rare risk (<1/10,000 cases) of myocarditis and pericarditis following vaccination with COMIRNATY. These conditions can develop within just a few days after vaccination and have primarily occurred within 14 days. They have been observed more often after the second vaccination, and more often in younger males. Available data suggest that the course of myocarditis and pericarditis following vaccination is not different from myocarditis or pericarditis in general. From post-marketing experience very rare adverse reactions of myocarditis and pericarditis, Rarecases of acute peripheral facial paralysis; uncommon incidence of insomnia, hyperhidrosis and night sweats, dizziness common incidence of vomiting, very common diarrhoea and unknown incidence (wcan not be estimated from available data) anaphylaxis, of paraesthesia and erythema multiforme, extensive swelling of vaccinated limb, facial swelling (in vaccine recipients with a history of injection of dermatological filers) and heavy menstrual bleeding(most case appeared to be non-serious and temporary in nature) have been identified after post-marketing experience. Anxiety-related reactions, including vasovagal reactions (syncope), hyperventilation or stress-related reactions (e.g. dizziness, palpitations, increases in blood pressure, paresthesia and sweating) may occur in association with the vaccination provider for evaluation. It is important that precautions are temporary and resolve on their own. Individuals should be advised to bring symptoms to the attention of the vaccination provider for evaluation. It is important that precautions are place to avoid injury from fainting.</p>
- Vaccination should be postponed in individuals suffering from acute severe febrile illness or acute infection. The presence of a minor infection and/or low-grade fever should not delay vaccination.
- As with other intramuscular injections, the vaccine should be given with caution in individuals receiving anticoagulant therapy or those with thrombocytopenia or any coagulation disorder (such as haemophilia) because bleeding or bruising may occur following an intramuscular administration in these individuals.
 The efficacy, safety and immunogenicity of the vaccine has not been assessed in immunocompromised individuals, including those receiving immunosuppressant therapy. The efficacy of COMIRNATY Original/Omicron BA.1 or COMIRNATY Original/Omicron BA.4-5 may be lower in immunosuppressed
- individuals.

 As with any vaccine, vaccination with COMIRNATY, COMIRNATY Original/Omicron BA.1 or COMIRNATY Original/Omicron BA.4-5 may not protect all vaccine recipients. Individuals may not be fully protected until 7 days after their second dose of the vaccine.
- Adverse reactions observed during clinical studies and identified after post authorization experience are listed below according to the following frequency categories: Very common (≥ 1/10), Common (≥ 1/10), Uncommon (≥ 1/10), Rare (≥ 1/10,000 to < 1/100), Very rare (< 1/10,000), Very rare (
- · Very common side effects: injection site pain, injection site swelling, , headache, muscle pain, chills, joint pain, diarrhea, fever, chills, fatigue
- · Common side effects: injection site redness, nausea, vomiting
- Uncommon side effects: enlarged lymph nodes (more frequently observed after the booster dose), feeling unwell, arm pain, insomnia, dizziness, injection site itching, allergic reactions such as rash, itching, urticaria or angioedema, feeling weak or lack of energy/sleepy, decreased appetite, excessive sweating, night sweats
- Rare side effects: temporary one-sided facial drooping
- Very rare side effects: inflammation of the heart muscle (myocarditis) or inflammation of the lining outside the heart (pericarditis), which can result in breathlessness, palpitations or chest pain.
- Not known indicence (cannot be estimated from the available data): anaphylaxis, extensive swelling of vaccinated limbs; facial swelling, pins and needles/tingling, reduced sense of touch or sensation, a skin reaction that causes red spots or patches on the skin, heavy menstrual bleeding
- A large amount of observational data from pregnant women vaccinated with the initially approved COMIRNATY vaccine during the second and third trimester have not shown an increase in adverse pregnancy outcomes. While data on pregnancy outcomes following vaccination during the first trimester are presently limited, no increased risk for miscarriage has been seen. COMIRNATY can be used during pregnancy. No effects on the breast-feeding woman to the initially approved COMIRNATY vaccine is negligible. Observational data from women who were breast-feeding after vaccination have not shown a risk for adverse effects in breast-feed newborn/infants. COMIRNATY can be used during breast-feeding.
- No data are available yet regarding the use of COMIRNATY Original/Omicron BA.1 or COMIRNATY Original/Omicron BA.4-5 during pregnancy. Since differences between products are confined to the spike protein sequence, and there are no clinically meaningful differences in reactogenicity between those COMIRNATY variant adapted vaccines that have been clinically evaluated, COMIRNATY Original/Omicron BA.4-5 can be used during pregnancy.
- No data are available yet regarding the use of COMIRNATY Original/Omicron BA.1 or COMIRNATY Original/Omicron BA.4-5 during breast-feeding. Observational data from women who were breast-feeding after vaccination with the initially approved COMIRNATY vaccine have not shown a risk for adverse effects in breast-feeding. Observational data from women who were breast-feeding after vaccination with the initially approved COMIRNATY vaccine have not shown a risk for adverse effects in breast-feeding. Observational data from women who were breast-feeding after vaccination with the initially approved COMIRNATY original/Omicron BA.4-5 can be used during breast-feeding.
- Interactions with other medicinal products or concomitant administration of COMIRNATY, COMIRNATY Original/Omicron BA.1 or COMIRNATY Original/Omicron BA.4-5 with other vaccines has not been studied.
- · Animal studies with COMIRNATY Original do not indicate direct or indirect harmful effects with respect to reproductive toxicity.
- In an analysis of Study 3 (Phase 2/3), 1,776 infants (1,178 Comirnaty 3 mcg and 598 placebo) were 6 to 23 months of age. The most frequent adverse reactions in infants 6 to 23 months of age that received any primary course dose included irritability (> 60%), drowsiness (> 40%), decreased appetite (> 30%), tenderness at the injection site (> 20%), injection site redness and fever (> 10%).
- The most frequent adverse reactions in children 2 to 4 years of age that received any primary course dose included pain at injection site and fatigue (> 40%), injection site redness and fever (> 10%).
- The overall safety profile of Comirnaty in participants 5 to 11 years of age was similar to that seen in participants 16 years of age and older. The most frequent adverse reactions in children 5 to 11 years of age that received 2 doses were injection site pain (> 80%), fatigue (> 50%), headache (> 30%), injection site redness and swelling (> 20%), myalgia, chills, and diarrhoea (> 10%).
- The overall safety profile for the booster dose was similar to that seen after the primary course. The most frequent adverse reactions in children 5 to 11 years of age were injection site pain (> 70%), fatigue (> 40%), headache (> 30%), myalgia, chills, injection site redness and swelling (> 10%)
- The overall safety profile of Comirnaty in adolescents 12 to 15 years of age was similar to that seen in participants 16 years of age and older. The most frequent adverse reactions in adolescents 12 to 15 years of age that received 2 doses were injection site pain (> 90%), fatigue and headache (> 70%), myalgia and chills (> 40%), arthralgia and pyrexia (> 20%)
- The most frequent adverse reactions in participants 16 years of age and older that received 2 doses were injection site pain (> 80%), fatigue (> 60%), headache (> 50%), myalgia (> 40%), chills (> 30%), arthralgia (> 20%), pyrexia and injection site swelling (> 10%) and were usually mild or moderate in intensity and
 resolved within a few days after vaccination. A slightly lower frequency of reactogenicity events was associated with greater age.
- The safety of a COMIRNATY Original/Omicron BA.1 booster dose in individuals from 18 to ≤ 55 years of age is extrapolated from safety data from a subset of 315 adults 18 to ≤ 55 years of age who received a booster (fourth dose) of Omicron BA.1 30 μg (monovalent) after completing 3 doses of COMIRNATY. The most frequent adverse reactions in these participants 18 to ≤ 55 years of age were injection site pain (> 70%), fatigue (> 60%), headache (> 40%), myalgia (> 30%), chills (> 30%) and arthralgia (> 20%).
- In a subset from Study 4 (Phase 3), 305 adults > 55 years of age who had completed 3 doses of COMIRNATY, received a booster of COMIRNATY Original/Omicron BA.1 after receiving Dose 3. The overall safety profile for the COMIRNATY Original/Omicron BA.1 booster (fourth dose) was similar to that seen after the COMIRNATY booster (third dose). The most frequent adverse reactions in participants greater than 55 years of age were injection site pain (> 50%), fatigue (> 40%), headache (> 30%), myalgia (> 20%), chills and arthralgia (> 10%). No new adverse reactions were identified for COMIRNATY Original/Omicron BA.1.
- The safety of a booster dose of COMIRNATY Original/Omicron BA-5 is inferred from safety data for a booster dose of COMIRNATY Original/Omicron BA.1 in individuals 18 years of age and older, as well as for a booster dose of COMIRNATY Original/Omicron BA.1 in individuals 5 years of age and older.
- The duration of protection afforded by the vaccine is unknown as it is still being determined by ongoing clinical trials. As with any vaccine, vaccination with Comirnaty Original/Omicron BA.1 or COMIRNATY Original/Omicron BA.4-5 may not protect all vaccine recipients
- For complete information on the safety of COMIRNATY, COMIRNATY Original/Omicron BA.1 and COMIRNATY Original/Omicron BA.4-5, always make reference to the approved Summary of Product Characteristics and Package Leaflet available in all the languages of the European Union on the EMA website.
 The black equilateral triangle V denotes that additional monitoring is required to capture any adverse reactions. This will allow quick identification of new safety information. Individuals can help by reporting any side effects they may get. Side effects they may get. Side effects they may get. Side effects they would be used to capture any adverse reactions. This will allow quick identification of new safety information. Individuals can help by reporting any side effects they may get. Side effects they may get. Side effects they may get. Side effects they would be used to be us



Safety Information

AUTHORIZED USE IN THE U.S.

COMIRNATY® (COVID-19 Vaccine, mRNA)

- COMIRNATY® (COVID-19 Vaccine, mRNA) is an FDA-approved COVID-19 vaccine for active immunization to prevent coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in individuals 12 years of age and older. It is also authorized as a third primary series dose to individuals 12 years of age and older who have certain kinds of immunocompromise
- The COVID-19 vaccine is FDA authorized under Emergency Use Authorization (EUA) for use in individuals 6 months and older to provide:
 - the first 2 doses of the 3-dose primary series for children 6 months through 4 years of age.
 - a 2-dose primary series to individuals 5 years through 11 years of age
 - a third primary series dose to individuals 5 years and older with certain kinds of immunocompromise

Pfizer-BioNTech COVID-19 Vaccine, Bivalent (Original and Omicron BA.4/BA.5)

- Pfizer-BioNTech COVID-19 Vaccine, Bivalent (Original and Omicron BA.4/BA.5) is FDA-authorized under Emergency Use Authorization (EUA) to prevent COVID-19 as:
 - the third dose of the 3-dose primary series following 2 doses of the monovalent* Pfizer-BioNTech COVID-19 Vaccine in children 6 months through 4 years of age; or
 - a single booster dose in children 6 months through 4 years of age at least 2 months after completion of primary vaccination with 3 doses of the monovalent Pfizer-BioNTech COVID-19 Vaccine; or
 - a single booster dose at least 2 months after completion of either primary vaccination with any authorized or approved COVID-19 vaccine or receipt of the most recent booster dose with any authorized or approved monovalent COVID-19 vaccine in individuals 5 years of age and older.

EMERGENCY USE AUTHORIZATION

Emergency uses of the vaccines have not been approved or licensed by FDA but have been authorized by FDA under an Emergency Use Authorization (EUA) to prevent Coronavirus Disease 2019 (COVID-19) in individuals aged 6 months and older for the Pfizer-BioNTech COVID-19 Vaccine and 5 years and older for the Pfizer-BioNTech COVID-19 Vaccine, Bivalent. The emergency uses are only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of the medical product under Section 564(b)(1) of the FD&C Act unless the declaration is terminated or authorization revoked sooner.

IMPORTANT SAFETY INFORMATION

Pfizer-BioNTech COVID-19 Vaccine, Bivalent (Original and Omicron BA.4/BA.5), COMIRNATY® (COVID-19 Vaccine, mRNA) and Pfizer-BioNTech COVID-19 Vaccine

- Do not administer Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine to individuals w
- Warnings:
 - Management of Acute Allergic Reactions: Appropriate medical treatment used to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of Pfizer-BioNTech COVID-19 Vaccine, Bivalent.
 - Monitor Pfizer-BioNTech COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention (CDC) guidelines (https://www.cdc.gov/vaccines/covid-19/clinicalconsiderations/managing-anaphylaxis.html)
 - Myocarditis and Pericarditis: Postmarketing safety data with Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent are relevant because these vaccines are manufactured using the same process.
 - Postmarketing data with authorized or approved Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent, demonstrate increased risks of myocarditis and pericarditis, particularly within the first week following receipt of the second primary series dose or first booster dose, with
 most booster doses likely administered at least 5 months after completing primary vaccination. For the Pfizer-BioNTech COVID-19 Vaccine, the observed risk is higher among adolescent males and adult males under 40 years of age than among females and older males, and the observed risk is highest in
 males 12 through 17 years of age. Although some cases required intensive care support, available data from short-term follow-up suggest that most individuals have had resolution of symptoms with conservative management. Information is not yet available about potential long-term sequelae. The CDC has
 published considerations related to myocarditis after vaccination, including for vaccination of individuals with a history of myocarditis or pericarditis (https://www.cdc.gov/vaccines/covid-19/clinical-considerations/myocarditis.html).
 - Syncope
 - Syncope (fainting) may occur in association with administration of injectable vaccines, in particular in adolescents. Procedures should be in place to avoid injury from fainting.
 - Altered Immunocompetence
 - Immunocompromised persons, including individuals receiving immunosuppressant therapy, may have a diminished immune response to the Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent.
- · Limitation of Effectiveness
 - Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent may not protect all vaccine recipients.
- Adverse reactions reported with the vaccine include:
 - Adverse Reactions in Clinical Trials
 - Adverse reactions following administration of a booster dose of the Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent that have been reported in clinical trials include injection site pain, fatigue, headache, muscle pain, chills, joint pain, injection site swelling, fever, injection site redness, lymphadenopathy, nausea, malaise, pain in extremity, rash, decreased appetite, vomiting, diarrhea (see Full EUA Prescribing Information).
 - Adverse Reactions Identified in Post Authorization Experience
 - Severe allergic reactions, including anaphylaxis, and other hypersensitivity reactions (e.g., rash, pruritus, urticaria, angioedema), diarrhea, vomiting, pain in extremity (arm), syncope, and dizziness have been reported following administration of the Pfizer-BioNTech COVID-19 Vaccine.
 - Myocarditis and pericarditis have been reported following administration of the Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent.
 - Additional adverse reactions, some of which may be serious, may become apparent with post-authorization use of the Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent.
- Use with Other Vaccines
 - There is no information on the co-administration of the Pfizer-BioNTech COVID-19 Vaccine or the Pfizer-BioNTech COVID-19 Vaccine, Bivalent, with other vaccines.

OUR VISION

USING THE FULL POTENTIAL OF THE IMMUNE SYSTEM TO DEVELOP NEW IMMUNOTHERAPIES AND VACCINES



BioNTech Today



Global organization on 5 continents

Presence in Europe, North America, Africa, Asia and Australia



New technologies for research innovations

>1,500 research and development professionalsSignificant R&D budget of €2.4 - 2.6bn in 2023



Broad pipeline across 4 drug classes

mRNA vaccines, small molecule immunomodulators, cell therapies and protein-based therapeutics



Expertise in the production of mRNA therapeutics and cell therapy

Global commercial-scale mRNA production



World-class partners

Pfizer, Genentech, Genmab, Regeneron, Fosun, Sanofi, Crescendo, Medigene, Ryvu, Bill & Melinda Gates Foundation, University of Pennsylvania and multiple notfor-profit organizations



Strong financial base

>€12.8bn in cash & cash equivalents plus security investments¹

¹ Consists of cash and cash equivalents of €12,143.9 million and security investments of €671.9 million, as of March 31, 2023. The payment settling the gross profit share for Q4 2022 (as defined by the contract) in the amount of €3,961 million was received from the collaboration partner as of April 14, 2023, subsequent to the end of the Q1 2023 reporting period. M&A activities and recent collaboration and license agreements announced in the first quarter did not result in any cash outflows as of March 31, 2023. Cash outflows and share considerations in connection with the planned acquisition of InstaDeep and the upfront payments for the collaboration and license agreements with OncoC4 and Duality Biologics of approximately €0.8 billion are expected (subject to change and excluding future potential earnout and milestone payments).



Vision: A Global Next-Generation Immunotherapy Company

LEADERSHIP IN COVID-19 VACCINES DEVELOPMENT

Build and expand a long-term and successful COVID-19 franchise. INNOVATIVE AND DIVERSIFIED PIPELINE

Develop potent and precise medicines to address diseases with high unmet medical need.

HEALTHCARE AND SOCIAL RESPONSIBILITY

Contribute to democratizing access to novel medicines around the globe.

INNOVATION AT SCALE

We want to establish dedicated organizational structures that foster holistic growth.

VISION

The foundation for our strategy is our corporate values, unique BioNTech culture, and our vision.



Advancing Towards Our Vision

Globally first-to-market BA.4-5-adapted COVID-19 vaccine



6 Phase 2 trials

7 programs in 8 clinical trials*

Infectious diseases

1 Phase 2 trial 1 Phase 3 trial

4 new FIH programs 5 new FIH programs

Driving transformation today

Next-generation and combination COVID-19 vaccines

Multiple oncology and infectious disease product launches in next 3-5 years

Mid-term goals

5-10 IND submissions per year

Deepen COVID-19 vaccine leadership

Approved products across various disease areas

Cardiovascular diseases Neurodegenerative diseases Autoimmune diseases

Long-term vision

We aim to be a multi-product global biotechnology leader with multiple approved products to help make individual cancer therapies available and address health challenges worldwide

*Excluding studies with Comirnaty. IND = Investigational new drug; FIH = First-in-human

BioNTech Achievements in 2022 & 2023



Goal: To deliver long-term value to patients, shareholders, and society



2022 & 2023: Global Growth



Global Social Responsibility at Our Core

Democratizing Access to Novel Medicines and Upholding Social Responsibility

CSR governance and regulation

- CSR core strategy: integration of sustainability in all responsible business areas
- Human rights due diligence: Implementation of all global regulatory requirements (esp. LkSG)
- Projects launched to implement CSRD regulation

Environmental & climate protection

- Currently under review by SBTi1: BioNTech's shortterm climate targets by 2030
- Submitted targets: absolute emission reduction of 42% by 2030 for Scope 1/2 and supplier engagement target for Scope 3
- Analysis of qualitative/financial climate risks according to TCFD3 completed, measures being implemented

For diseases with medical care gaps



Development programs for infectious diseases in support of UN Sustainable Development Goal 3: HSV-2, tuberculosis, malaria and shingles

Sustainable, scalable mRNA manufacturing

- March 2023: first BioNTainer arrived in Kigali, Rwanda
- Aim of building BioNTainers for other partner countries Australia, Senegal, and Israel

COVID-19 vaccine delivery to LMICs

 1.7 billion doses of COVID-19 vaccine in total to lowand middle-income countries (LMICs) delivered in line with demand²

1. LkSG: Gesetz über die unternehmerischen Sorgfaltspflichten zur Vermeidung von Menschenrechtsverletzungen in Lieferketten 2. SBTi: Science Based Targets initiative 3. TCFD: Task Force on Climate-related Financial Disclosures 4. Stand December 2022

11111

§

()

COVID-19 VACCINE GLOBAL LEADERSHIP



2022: Continued Leadership against COVID-19



Partnered with Prizer
 2 As of Dec. 16, 2022
 3 Prizer/BioNTech cumulative global COVID-19 market share across reporting countries; CDC, ECDC OWID data as of Nov 2022
 4 in the U.S., EU and United Kingdom

Invoiced ~2 billion doses of vaccine

First to market BA.4-5 variant-adapted vaccine¹

~2 months from recommendations of regulatory authorities to vaccine delivery

Shipped ~550 million doses of variant-adapted vaccine²

COMIRNATY market share: ~64%³

Broadest label amongst COVID-19 vaccines⁴



COVID-19 Franchise: Building for Continued Success



Ability to rapidly roll out new vaccines at commercial scale within months



Comprehensive COVID-19 research program



Leveraging AI and ML for pandemic preparedness



Investments in combination vaccines and nextgeneration COVID-19 vaccines



Development of a variant-adapted vaccine for 2023



¹ AI = Artificial Intelligence; ML = Machine Learning

Deaths and Hospitalizations due to COVID-19 and Flu (2022)

- A leading cause of death worldwide, estimated to exceed 6.8 million deaths¹
- A leading cause of respiratory disease hospitalization in the United States²
- Evidence suggesting that patients with the SARS-CoV-2 Omicron variant had a higher risk of in-hospital mortality than those with influenza³
- Estimated to be >680,000 long COVID sufferers worldwide (more than 10% of COVID survivors)^{4,5}



1. WHO Coronavirus (COVID-19) Dashboard; 2. https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html; 3. Portmann et al. Jama Netw Open. 2023; 4. Huerne K. Am J Med Open. 2023; 5. Davis H et al. Nature Reviews Microbiology. 2023; 6. https://www.cdc.gov/flu/about/burden/preliminary-in-season-estimates.htm; 7. https://www.cdc.gov/flu/a



DIVERSIFIED PRODUCT PIPELINE



Technology Agnostic Innovation Engine

Core principles of our technology strategy

Technology agnostic approach rooted in deep fundamental understanding of biology

Build novel platforms with the ability to produce multiple product candidates

Open up new combination opportunities which leverage synergistic modes of action

Enable individualized treatment



1 mRNA encoded cancer-targeting antibodies and cytokines. AI = Artificial intelligence: CAR = chimeric antigen receptor: TLR = Toll-like receptor: TCR = T cell receptor: STING = stimulator of interferon gene



Long-Term Strategy: Expand Treatment Options for Solid Tumor Patients



BIONTECH

Oncology Pipeline

Drug Class	Phase 1 (5 First-in-Human)	Phase 1/2	Phase 2
	BNT111 Advanced melanoma	BNT112 Prostate cancer	BNT111 aPD1-R/R melanoma, + pembrolizumab
	BNT116 2L NSCLC	BNT113 ¹ HPV16+ head and neck cancer	BNT113 1L rec./met. HPV16+ PDL1+ head and peck cancer + pembrolizumab
mRNA	Autogene cevumeran (BNT122) ² Multiple solid tumors	BNT141 (CLDN18.2) Multiple solid tumors	Autogene cevumeran (BNT122) ² 1L adv. melanoma, + pembrolizumab
BNT131 (SAR44100 Solid tumors (IL-12sc, IL15-sushi, BNT152 + BNT153 Multiple solid tumors	BNT131 (SAR441000) ³ Solid tumors (IL-12sc, IL15-sushi, GM-CSF, IFNα)	BNT142 (CLDN6) Multiple solid tumors	Autogene cevumeran (BNT122) ² Adjuvant colorectal cancer
	BNT152 + BNT153 Multiple solid tumors (IL-7, IL-2)	BNT151 (IL-2 variant) Multiple solid tumors	
Cell therapy	BNT221 Refractory metastatic melanoma	BNT211 (CLDN6) Multiple solid tumors	
	BNT321 Pancreatic cancer (sLea)	BNT311 (GEN1046) ⁴ (PD-L1x4-1BB) Multiple solid tumors	BNT311 (GEN1046) ⁴ (PD-L1x4-1BB) aPD1-r/r NSCLC, + pembrolizumab
Protein-based therapeutics	BNT322 (GEN1056)⁴ (undisclosed) Multiple solid tumors	BNT312 (GEN1042) ⁴ (CD40x4-1BB) Multiple solid tumors	BNT316 (ONC-392) ⁵ (CTLA-4) Platr ovarian cancer, + pembrolizumab
		BNT313 (GEN1053) ⁴ (CD27) Multiple solid tumors	
		BNT316 (ONC-392) ⁵ (CTLA-4) Multiple solid tumors	
		BNT323 (DB-1303) ⁶ (HER2) Multiple solid tumors	
SMIM		BNT411 (TLR7) Multiple solid tumors	

1. Investigator-initiated / Investigator-initiated and sponsored trial; 2. Partnered with Genentech, member of Roche Group; 3. Partnered with Sanofi; 4. Partnered with Genmab; 5. Partnered with OncoC4; 6. Partnered with DualityBio. NSCLC = Non-small cell lung cancer; HPV = Human papillomavirus; CLDN = Claudin; IL = Interleukin;1L = first line; TLR = Toll-like receptor; r/r = Relapsed/refractory; Plat.-r. = Platinum-resistant; ADC = Antibody-drug conjugate; SMIM = small molecule immunomodulator.



Infectious Diseases: Important Growth Area Addressing High Medical and Global Health Need

Ongoing clinical programs:

- COVID-19¹
- COVID-19+Influenza²
- Influenza³
- HSV-2⁴
- Malaria
- Tuberculosis⁵
- Shingles¹

HSV-2

~491 million people aged 15 – 49 infected worldwide

Once infected, **HSV** stays in the body for life with recurring symptomatic outbreaks

Malaria

~247 million cases
in 2021 worldwide
 ~691,000 deaths
 in 2021
 (of which 82% in
 children <5 years from
 African regions)</pre>

Tuberculosis

- ~10.6 million cases in 2021 worldwide
- **~1.6 million deaths** in 2021 worldwide

Shingles

~95% of the population >50 years is at risk of developing shingles



All figures from World Health Organization (WHO) factsheets. https://www.who.int/news-room/fact-sheets (accessed April 14, 2023).

1.Partnership with Pfizer; 2. Cooperation with PFE and subject to agreement with our partners; 3. Exclusive license to Pfizer; 4. Cooperation with University of Pennsylvania; 5. Cooperation with Bill & Melinda Gates Foundation. HSV = Herpes simplex virus

Influenza

290,000 - 650,000

deaths



Infectious Disease Pipeline

	Phase 1	Phase 2	Phase 3	Commercial
	BNT162b4 + BNT162b2 ¹ (T-cell enhancing) COVID-19	BNT162b5 ¹ (Enhanced spike antigen) COVID-19	BNT161 ⁵ Influenza	COMIRNATY ¹ COVID-19
Pfizer Partnered Programs	BNT162b2+BNT161 ² (qFlu + BA.4-5-adapted bivalent) COVID-19/influenza combination			BNT162b2 (Original/Omicron BA.4-5-adapted bivalent) ¹ COVID-19
	BNT167 ¹ Shingles			BNT162b2 (Original/Omicron BA.1-adapted bivalent) ¹ COVID-19
Proprietary	BNT163 ³ HSV-2			
Vaccines				
Global Health	BNT165 Malaria			
Programs	BNT164 ⁴ Tuberculosis			

1. Partnered with Pfizer; 2. Collaboration with Pfizer and subject to reaching agreement with our partners; 3. Collaboration with University of Pennsylvania; 4. In collaboration with Bill & Melinda Gates Foundation; 5. Exclusive license to Pfizer. HSV = Herpes simplex virus



OUTLOOK 2023



2023 Strategic Priorities

	Acceleration & development of pipeline	
COVID-19 Franchise ^{1,2}	Immuno-oncology	Infectious diseases
Strengthen market leadership in COVID-19 Advance next-gen vaccines	Start of potential pivotal studies	Initiation of clinical programs for high need indications
Continued product innovation	Focus programs	Portfolio
Next-generation vaccines	INDIVIDUALIZED mRNA VACCINES AGAINST CANCER Autogene	Pfizer Other programs collaborations HSV-2
Variant-adapted vaccines	Cevumeran BNT122 ³ CAR-T CELLS BOOSTERT WITH mRNA- VACCINES BNT211	Influenza Shingles
Vaccine Combinations	ANTIBODY DRUG CONJUGATES BNT323 (DB-1303) ⁶	Global health focus Malaria Tuberkulose

Building a commercial organization and expanding our global presence and clinical development

1. In Partnerschaft mit Pfizer, 2. In Kooperation mit PFE und vorbehaltlich der Vereinbarung mit unseren Partnern, 3. In Partnerschaft mit Genentech, Teil der Roche Gruppe, 4. In Partnerschaft mit Genmab, 5. In Partnerschaft mit OncoC4, 6. In Partnerschaft mit Duality Bio; 7. In Kooperation mit Bill & Melinda Gates Foundation; 8. In Kooperation mit der University of Pennsylvania.

BIONTECH



Financial Development 2022 & Q1 2023 and Financial Outlook 2023

Jens Holstein, CFO









Key financial figures for FY 2022

Total revenues¹

Operating cashflow

Diluted EPS

Cash and cash equivalents²

1. BioNTech's share of profit is estimated as further described in the 2022 Annual Report based on preliminary data exchanged between Pfizer and BioNTech. Any changes in the estimated share of the collaborator's gross profit are recorded prospectively; 2. The payment settling the gross profit share for the third quarter of 2022 (as defined by the contract) in the amount of €1,816.5 million was received from the collaboration partner as of January 12, 2023, subsequent to the end of the reporting period. € 17.3_{bn}
 € 13.6_{bn}
 € 37.77

_ **€ 13.9**bn



FY 2022 Guidance vs. Actuals

		Updated guidance (as published in Q3 2022 Financial Results and Corporate Update)	Actual FY 2022
COVID-19 vaccine revenues	Estimated BioNTech COVID-19 vaccine revenues ¹	€16 – 17 bn	€17.1 bn
	R&D expenses	€1,400 – 1,500 m	€1,537 m
Expenses and capex	SG&A expenses	€450 – 550 m	€544 m
	Capital expenditure	€450 – 550 m	€363 m
Tax assumptions	BioNTech Group estimated annual effective income tax rate	~ 27%	(IFRS) ~ 27% (cash-effective) ² ~ 24%

1. BioNTech's share of profit is estimated as further described in the 2022 Annual Report based on preliminary data exchanged between Pfizer and BioNTech. Any changes in the estimated share of the collaborator's gross profit are recorded prospectively; 2. Reduction in cash-effective tax rate due to IAS 12.68c as a result of tax deductibility of share-based payment settlement.



FY 2022 Financial Results – Profit and Loss

(in millions €, except per share data)¹		Year ended December 31,	
	2022	2021	
Commercial revenues ²	17,194.6	18,874.0	
Research & development revenues	116.0	102.7	
Total revenues	17,310.6	18,976.7	
Cost of sales	(2,995.0)	(2,911.5)	
Research and development expenses	(1,537.0)	(949.2)	
Sales and marketing expenses	(59.5)	(50.4)	
General and administrative expenses	(484.7)	(285.8)	
Other operating income less expenses	408.3	504.0	
Operating income	12,642.7	15,283.8	
Finance income less expenses	311.4	(237.4)	
Income taxes	(3,519.7)	(4,753.9)	
Profit for the period	9,434.4	10,292.5	
Earnings per share			
Basic profit for the period per share	38.78	42.18	
Diluted profit for the period per share	37.77	39.63	

1. Numbers have been rounded, numbers presented may not add up precisely to the totals and may have been adjusted in the table context. Presentation of the consolidated statements of profit and loss has been condensed; 2. BioNTech's share of profit is estimated as further described in the 2022 Annual Report based on preliminary data exchanged between Pfizer and BioNTech. Any changes in the estimated share of the collaborator's gross profit are recorded prospectively.

-	Q1	2023	Key	Highlights	

Total revenues¹

Operating result

Diluted EPS

Total cash and cash equivalents plus security investments²

1. BioNTech's share of profit is estimated as further described in the 2022 Annual Report based on preliminary data exchanged between Pfizer and BioNTech. Any changes in the estimated share of the collaborator's gross profit are recorded prospectively; 2. Consists of cash and cash equivalents of €12,143.9 million and security investments of €671.9 million, as of March 31, 2023. The payment settling the gross profit share for the fourth quarter of 2022 (as defined by the contract) in the amount of €3,961 million was received from the collaboration partner as of April 14, 2023, subsequent to the end of the reporting period. M&A activities and recent collaboration and license agreements announced in the first quarter did not result in any cash outflows as of March 31, 2023. Cash outflows and share considerations in connection with the planned acquisition of InstaDeep and the upfront payments of the collaboration and license agreements with OncoC4 and Duality Biologics of approximately €0.8 billion are expected (subject to change and excluding future potential earn-out and milestone payments).

€ **1 3** bn €0.7bn €2.05 € 12.8bn



Q1 2023 Financial Results – Profit and Loss

(in millions €, except per share data)¹		Three months ended March 31,
	2023	2022
Commercial revenues ²	1,276.5	6,362.2
Research & development revenues	0.5	12.4
Total revenues	1,277.0	6,374.6
Cost of sales	(96.0)	(1,294.1)
Research and development expenses	(334.0)	(285.8)
Sales and marketing expenses	(12.2)	(14.3)
General and administrative expenses	(119.4)	(90.8)
Other operating income less expenses	(61.0)	63.1
Operating income	654.4	4,752.7
Finance income less expenses	53.3	265.4
Income taxes	(205.5)	(1,319.3)
Profit for the period	502.2	3,698.8
Earnings per share		
Basic profit for the period per share	2.07	15.13
Diluted profit for the period per share	2.05	14.24

1. Numbers have been rounded, numbers presented may not add up precisely to the totals and may have been adjusted in the table context. Presentation of the unaudited interim consolidated statements of profit and loss has been condensed; 2. BioNTech's share of profit is estimated as further described in the 2022 Annual Report based on preliminary data exchanged between Pfizer and BioNTech. Any changes in the estimated share of the collaborator's gross profit are recorded prospectively.



FY 2022 and Q1 2023 Return to Shareholders

2022: Dividend for FY 2021

Dividend in the amount of €0.5 bn paid

2022 & 2023: Share Repurchase Program

Repurchase American Depositary Shares (ADS) in the amount of up to \$1.5 bn

Repurchased ADSs are to be used in part to satisfy settlement obligations under share-based payment arrangements

Two tranches executed between May 2022 and March 2023

Total consideration of approximately \$1.3 bn under the program

Period	Number of acquired ADSs	Percentage of share capital ¹	Average price (in \$)	Volume (in million \$)
May 2, 2022 to March 17, 2023	9,166,684	3.7%	142.04	1,302

1. For the share repurchase, the "percentage of share capital" ratio is calculated based on the shares issued as of April 30, 2022 (248,552,200 ordinary shares)



FY 2022 Capital Transactions

	Fulfillment period	Number of ordinary shares issued	Share of issued share capital ¹	Issue/settle- ment price	Total issue amount
Capital increases from authorized or condition	al capital with the exclusion	of subscription rights			
Pfizer Inc. (authorized capital with simplified exclusion of subscription rights ²)	Mar. 2022	497,727	0.2%	€266.63 ³	€132.7 m ³
Temasek Capital Management Pte. Ltd. Mandatory convertible bond (conditional capital)	Apr. 2022 (Jun. 2020 ⁴)	1,744,392	0.7%	€57.33 ⁴	€100.0 m ⁴
Total number of ordinary shares issued from a capital with exclusion of subscription rights	uthorized or conditional	2,242,119			
Use of ADSs held in treasury					
		E			
ESOP 2018 Settlement	Nov. + Dec. 2022 ⁶	5,035,217°	2.0%	€160.44	—
LTI-Plus Settlement	Dec. 2022	364,079 ⁵	0.1%	€171.40	_
Total number used ADSs previously held in tre	easury	5,399,296			

1. The "share of issued share capital" ratio is calculated on the basis of the shares issued as of the respective fulfillment period; 2. Sec. 186 para. 3 sent. German Stock Corporation Act (*Aktiengesetz*); 3. The ordinary shares were issued in U.S. dollars; the amounts represent the issue amount agreed in the Investment Agreement. Conversion into Euros is made using the foreign exchange rate as published by the German Central Bank (*Deutsche Bundesbank*) as of the time the issue price was defined. The opening price of the BioNTech ADS on January 3, 2022 (first trading day after the signing of the Management Board resolution on the Investment Agreement) on the Nasdaq Global Select Market was €223.58 (converted into Euros using the foreign exchange rate as published by the German Central Bank (*Deutsche Bundesbank*) for that day). Balance sheet figures differ; 4. Based on contractual agreements from June 2020; 5. Represents use of ADSs previously held in treasury; 6. Since May 2023, treasury shares have again been issued under the ESOP 2018.



FY 2023 Financial Guidance

Key Assumptions and Considerations



Expected transition from an advanced purchase agreement environment to commercial market ordering starting in 2023 and a regulatory recommendation to adapt the COVID-19 vaccines to newly circulating variants or sublineages of SARS-CoV-2.



Revenue guidance reflects expected deliveries under existing or committed supply contracts and anticipated sales through traditional commercial orders.



Renegotiation of the existing supply contract with the European Commission is ongoing, with the possibility of spreading dose supplies over several years and/or reducing volumes.



Expected increase in demand for a new, adapted vaccine with a simultaneous reduction in the number of primary and booster vaccinations.



Assumption of seasonal demand, majority of revenues expected in second half of 2023.



2023 FY Guidance Reiterated¹

COVID-19 vaccine revenues for FY 2023	Estimated BioNTech COVID-19 vaccine revenues	~ €5 bn
	R&D expenses ²	€2,400 – 2,600 m
Planned FY 2023 expenses and capex	SG&A expenses	€650 – 750 m
	Capital expenditure for operating activities ³	€500 – 600 m
Estimated FY 2023 tax assumptions	BioNTech Group estimated annual cash-effective income tax rate	~ 27%

1.Numbers reflect current base case projections and are calculated based on constant currency rates;

2. Numbers include effects identified from additional collaborations or potential M&A transactions to the extent disclosed and identified and will be updated as needed;

3. Numbers exclude potential effects caused by or driven from collaborations or M&A transactions.



FY 2023 Capital Allocation Framework

R&D activities

Main focus remains on the acceleration of our R&D activities in oncology and infectious diseases.

M&A and business development

Strengthen pipeline, technology platforms and digital capabilities by collaborations and potential complementary M&A.

Return capital to shareholders

New share repurchase program of up to \$0.5bn during 2023.





