

# Pfizer and BioNTech Initiate Rolling Submission for Emergency Use Authorization of Their COVID-19 Vaccine in Children 6 Months Through 4 Years of Age Following Request From U.S. FDA

Tuesday, February 01, 2022 - 04:20pm

- *With pediatric COVID-19 cases surpassing 10 million and at the request of the FDA, the companies have submitted available data on the safety and efficacy of two 3 µg doses as part of a three-dose primary series for this age group to address the urgent public health need*
- *Companies plan to submit additional data on a third 3 µg dose in this age group in the coming months*
- *If authorization is granted, the Pfizer-BioNTech vaccine would be the first COVID-19 vaccine available for pediatric populations under 5 years of age*

NEW YORK & MAINZ, Germany--(BUSINESS WIRE)-- Pfizer Inc. (NYSE: PFE) and BioNTech SE (Nasdaq: BNTX) today announced that following a request from the U.S. Food and Drug Administration (FDA) the companies have initiated a rolling submission seeking to amend the Emergency Use Authorization (EUA) of the Pfizer-BioNTech COVID-19 Vaccine to include children 6 months through 4 years of age (6 months to <5 years of age), in response to the urgent public health need in this population. The companies expect to complete the EUA submission in the coming days. This application is for authorization of the first two 3 µg doses of a planned three-dose primary series in this age group. Data on a third dose given at least 8 weeks after completion of the second dose are expected in the coming months and will be submitted to the FDA to support a potential expansion of this requested EUA.

Since the pandemic began, more than 10.6 million children have tested positive for COVID-19 in the U.S.,<sup>1</sup> with children under 4 accounting for more than 1.6 million of those cases.<sup>2</sup> Further, reported COVID-19 cases and related hospitalization among children have spiked dramatically across the United States during the Omicron variant surge. For the week ending January 22, children under 4 accounted for 3.2% of the total hospitalizations due to COVID-19.<sup>2</sup> If authorization is granted, the Pfizer-BioNTech COVID-19 Vaccine would be the first vaccine available to help protect children under 5 years of age from this disease, potentially including future emerging variants of concern.

“As hospitalizations of children under 5 due to COVID-19 have soared, our mutual goal with the FDA is to prepare for future variant surges and provide parents with an option to help protect their children from this virus,” said Albert Bourla, Chairman and Chief Executive Officer, Pfizer. “Ultimately, we believe that three doses of the vaccine will be needed for children 6 months through 4 years of age to achieve high levels of protection against current and potential future variants. If two doses are authorized, parents will have the opportunity to begin a COVID-19 vaccination series for their children while awaiting potential authorization of a third dose.”

“Our vaccine has already demonstrated a favorable safety, tolerability and efficacy profile in multiple clinical trials and real-world studies for all age groups starting from 5 years old,” said Ugur Sahin, M.D., CEO and Co-founder of BioNTech. “If authorized, we are very excited about the prospect of offering parents the opportunity to help protect their children 6 months through 4 years of age from COVID-19 and the potentially severe consequences of infection.”

The request to amend the EUA is based on the totality of data on the safety, tolerability, immunogenicity, and available efficacy of two doses of the Pfizer-BioNTech COVID-19 Vaccine. The companies also plan to share these data with the European Medicines Agency and other regulatory agencies around the world.

The companies plan to provide ample supply of the 3 µg dose to meet demand should the FDA approve the EUA application. The companies previously announced planned global supply capacity of approximately four billion doses of the Pfizer-BioNTech COVID-19 Vaccine in 2022. The companies continue to supply the vaccine under their existing supply agreement with the U.S. government, which continues through April 2022.

### **About the Phase 1/2/3 Trial in Children**

The Phase 1/2/3 trial initially enrolled 4,500 children ages 6 months to under 12 years of age in the United States, Finland, Poland, and Spain from more than 90 clinical trial sites. Additional children have been enrolled in all age groups following study amendments and the trial currently includes approximately 8,300 children. It was designed to evaluate the safety, tolerability, and immunogenicity of the Pfizer-BioNTech vaccine on a two-dose schedule (approximately 21 days apart) in three age groups: ages 5 to under 12 years; ages 2 to under 5 years; and ages 6 months to under 2 years. Based on the Phase 1 dose-escalation portion of the trial, children ages 5 to under 12 years received a two-dose schedule of 10 µg each while children under age 5 received a lower 3 µg dose for each injection in the Phase 2/3 study. The trial enrolled children with or without prior evidence of SARS-CoV-2 infection. On December 17, 2021, Pfizer and BioNTech announced the companies would test a third 3 µg dose given at least two months after the second dose in children under age 5 and a third dose of the 10 µg formulation in children 5 to under 12 years of age.

The Pfizer-BioNTech COVID-19 Vaccine, which is based on BioNTech’s proprietary mRNA technology, was developed by both BioNTech and Pfizer. BioNTech is the Marketing Authorization Holder in the United States, the European Union, the United Kingdom, Canada and other countries, and the holder of emergency use authorizations or equivalents in the United States (jointly with Pfizer) and other countries. Submissions to pursue regulatory approvals in those countries where emergency use authorizations or equivalent were initially granted are planned.

### **U.S. Indication & Authorized Use**

#### **HOW IS THE VACCINE GIVEN?**

The vaccine will be given as an injection into the muscle.

#### **Primary Series:**

In individuals 5 years of age and older, the vaccine is administered as a 2-dose series, 3 weeks apart. In individuals 5 years of age and older, a third primary series dose may be administered at least 28 days after the second dose to individuals who are determined to have certain kinds of immunocompromise.

#### **Booster Dose:**

- A single booster dose of the vaccine may be administered at least 5 months after completion of a primary series of the Pfizer-BioNTech COVID-19 Vaccine or COMIRNATY® (COVID-19 Vaccine, mRNA) to

- individuals 12 years of age and older
- A single booster dose of the vaccine may be administered to individuals 18 years of age and older who have completed primary vaccination with a different authorized COVID-19 vaccine. Individuals should check with their healthcare provider regarding timing of the booster dose

## WHAT IS THE INDICATION AND AUTHORIZED USE?

The Pfizer-BioNTech COVID-19 Vaccine has received EUA from FDA to provide:

- a 2-dose primary series to individuals 5 years of age and older
- a third primary series dose to individuals 5 years of age and older who have been determined to have certain kinds of immunocompromise
- a single booster dose to individuals 12 years of age and older who have completed a primary series with Pfizer-BioNTech COVID-19 Vaccine or COMIRNATY® (COVID-19 Vaccine, mRNA)
- a single booster dose to individuals 18 years of age and older who have completed primary vaccination with a different authorized COVID-19 vaccine. The booster schedule is based on the labeling information of the vaccine used for the primary series

COMIRNATY® (COVID-19 Vaccine, mRNA) is an FDA-approved COVID-19 vaccine made by Pfizer for BioNTech.

- It is approved as a 2-dose series for prevention of COVID-19 in individuals 16 years of age and older
- It is also authorized under EUA to provide:
  - a 2-dose primary series to individuals 12 through 15 years of age
  - a third primary series dose to individuals 12 years of age and older who have been determined to have certain kinds of immunocompromise
  - a single booster dose to individuals 12 years of age and older who have completed a primary series with Pfizer-BioNTech COVID-19 Vaccine or COMIRNATY® (COVID-19 Vaccine, mRNA)
  - a single booster dose to individuals 18 years of age and older who have completed primary vaccination with a different authorized COVID-19 vaccine. The booster schedule is based on the labeling information of the vaccine used for the primary series

## EUA Statement

Emergency uses of the vaccine 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 5 years of age and older. 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. Please see EUA Fact Sheets at [www.cvdvaccine-us.com](http://www.cvdvaccine-us.com).

## IMPORTANT SAFETY INFORMATION

Individuals should **not** get the vaccine if they:

- had a severe allergic reaction after a previous dose of this vaccine
- had a severe allergic reaction to any ingredient of this vaccine

Individuals should tell the vaccination provider about all of their medical conditions, including if they:

- have any allergies

- have had myocarditis (inflammation of the heart muscle) or pericarditis (inflammation of the lining outside the heart)
- have a fever
- have a bleeding disorder or are on a blood thinner
- are immunocompromised or are on a medicine that affects the immune system
- are pregnant, plan to become pregnant, or are breastfeeding
- have received another COVID-19 vaccine
- have ever fainted in association with an injection

The vaccine may not protect everyone.

Side effects reported with the vaccine include:

- There is a remote chance that the vaccine could cause a severe allergic reaction
  - A severe allergic reaction would usually occur within a few minutes to 1 hour after getting a dose of the vaccine. For this reason, vaccination providers may ask individuals to stay at the place where they received the vaccine for monitoring after vaccination
  - Signs of a severe allergic reaction can include difficulty breathing, swelling of the face and throat, a fast heartbeat, a bad rash all over the body, dizziness, and weakness
  - If an individual experiences a severe allergic reaction, they should call 9-1-1 or go to the nearest hospital
- Myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining outside the heart) have occurred in some people who have received the vaccine, more commonly in males under 40 years of age than among females and older males. In most of these people, symptoms began within a few days following receipt of the second dose of the vaccine. The chance of having this occur is very low. Individuals should seek medical attention right away if they have any of the following symptoms after receiving the vaccine:
  - chest pain
  - shortness of breath
  - feelings of having a fast-beating, fluttering, or pounding heart
- Additional side effects that have been reported with the vaccine include:
  - severe allergic reactions; non-severe allergic reactions such as rash, itching, hives, or swelling of the face; myocarditis (inflammation of the heart muscle); pericarditis (inflammation of the lining outside the heart); injection site pain; tiredness; headache; muscle pain; chills; joint pain; fever; injection site swelling; injection site redness; nausea; feeling unwell; swollen lymph nodes (lymphadenopathy); decreased appetite; diarrhea; vomiting; arm pain; fainting in association with injection of the vaccine
- These may not be all the possible side effects of the vaccine. Serious and unexpected side effects may occur. The possible side effects of the vaccine are still being studied in clinical trials. Call the vaccination provider or healthcare provider about bothersome side effects or side effects that do not go away

Data on administration of this vaccine at the same time as other vaccines have not yet been submitted to FDA. Individuals considering receiving this vaccine with other vaccines, should discuss their options with their healthcare provider.

Patients should always ask their healthcare providers for medical advice about adverse events. Individuals are encouraged to report negative side effects of vaccines to the US Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC). Visit <https://www.vaers.hhs.gov> or call 1-800-822-7967. In addition, side effects can be reported to Pfizer Inc. at [www.pfizersafetyreporting.com](http://www.pfizersafetyreporting.com) or by calling 1-800-438-1985.

Click for

Fact Sheets and Prescribing Information for individuals 12 years of age and older

[Full Prescribing Information \(16 years of age and older\) DILUTE BEFORE USE, Purple Cap](#)

[Full Prescribing Information \(16 years of age and older\) DO NOT DILUTE, Gray Cap](#)

[EUA Fact Sheet for Vaccination Providers \(12 years of age and older\), Purple Cap](#)

[EUA Fact Sheet for Vaccination Providers \(12 years of age and older\), Gray Cap](#)

[Recipients and Caregivers Fact Sheet \(12 years of age and older\)](#)

Fact Sheets for individuals 5 through 11 years of age

[EUA Fact Sheet for Vaccination Providers \(5 through 11 years of age\), Orange Cap](#)

[Recipients and Caregivers Fact Sheet \(5 through 11 years of age\)](#)

### **About Pfizer: Breakthroughs That Change Patients' Lives**

At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products, including innovative medicines and vaccines. Every day, Pfizer colleagues work across developed and emerging markets to advance wellness, prevention, treatments and cures that challenge the most feared diseases of our time. Consistent with our responsibility as one of the world's premier innovative biopharmaceutical companies, we collaborate with health care providers, governments and local communities to support and expand access to reliable, affordable health care around the world. For more than 170 years, we have worked to make a difference for all who rely on us. We routinely post information that may be important to investors on our website at [www.Pfizer.com](http://www.Pfizer.com). In addition, to learn more, please visit us on [www.Pfizer.com](http://www.Pfizer.com) and follow us on Twitter at [@Pfizer](https://twitter.com/Pfizer) and [@Pfizer News](https://twitter.com/PfizerNews), [LinkedIn](#), [YouTube](#) and like us on Facebook at [Facebook.com/Pfizer](https://www.facebook.com/Pfizer).

### **Pfizer Disclosure Notice**

The information contained in this release is as of February 1, 2022. Pfizer assumes no obligation to update forward-looking statements contained in this release as the result of new information or future events or developments.

This release contains forward-looking information about Pfizer's efforts to combat COVID-19, the collaboration between BioNTech and Pfizer to develop a COVID-19 vaccine, the BNT162b2 mRNA vaccine program, and the Pfizer-BioNTech COVID-19 Vaccine, also known as COMIRNATY (COVID-19 Vaccine, mRNA) (BNT162b2) (including a rolling submission to request an amendment to the emergency use authorization to include children 6 months through 4 years of age in the U.S. and plans to share these data with the European Medicines Agency and other regulatory agencies, a potential third dose in children 6 months through 4 years of age, BNT162b2's potential against future emerging variants of concern, qualitative assessments of available data, potential benefits, expectations for clinical trials, the anticipated timing of data readouts, regulatory submissions, regulatory approvals or authorizations and anticipated manufacturing, distribution and supply) involving substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Risks and uncertainties include, among other things, the uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for clinical trials, regulatory submission dates, regulatory approval dates and/or launch dates, as well as risks associated with preclinical and clinical data (including the Phase 1/2/3 of Phase 4 data) for BNT162b2 or any other vaccine candidate in the BNT162 program in any of our studies in pediatrics, adolescents or adults or real world evidence, including the possibility of unfavorable new preclinical,

clinical or safety data and further analyses of existing preclinical, clinical or safety data or further information regarding the quality of pre-clinical, clinical or safety data, including by audit or inspection; the ability to produce comparable clinical or other results, including the rate of vaccine effectiveness and safety and tolerability profile observed to date, in additional analyses of the Phase 3 trial and additional studies, in real-world data studies or in larger, more diverse populations following commercialization; the ability of BNT162b2 or any future vaccine to prevent COVID-19 caused by emerging virus variants; the risk that more widespread use of the vaccine will lead to new information about efficacy, safety, or other developments, including the risk of additional adverse reactions, some of which may be serious; the risk that preclinical and clinical trial data are subject to differing interpretations and assessments, including during the peer review/publication process, in the scientific community generally, and by regulatory authorities; whether and when additional data from the BNT162 mRNA vaccine program will be published in scientific journal publications and, if so, when and with what modifications and interpretations; whether regulatory authorities will be satisfied with the design of and results from these and any future preclinical and clinical studies; whether and when submissions to request emergency use or conditional marketing authorizations for BNT162b2 in additional populations, for a potential booster dose for BNT162b2 or any potential future vaccines (including potential future annual boosters or re-vaccination), and/or other biologics license and/or emergency use authorization applications or amendments to any such applications may be filed in particular jurisdictions for BNT162b2 or any other potential vaccines that may arise from the BNT162 program, including a potential variant-based vaccine, and if obtained, whether or when such emergency use authorizations or licenses will expire or terminate; whether and when any applications that may be pending or filed for BNT162b2 (including the requested amendment to the EUA in the U.S. to include children 6 months through 4 years of age or any other requested amendments to emergency use or conditional marketing authorizations) or other vaccines that may result from the BNT162 program may be approved by particular regulatory authorities, which will depend on myriad factors, including making a determination as to whether the vaccine's benefits outweigh its known risks and determination of the vaccine's efficacy and, if approved, whether it will be commercially successful; decisions by regulatory authorities impacting labeling or marketing, manufacturing processes, safety and/or other matters that could affect the availability or commercial potential of a vaccine, including development of products or therapies by other companies; disruptions in the relationships between us and our collaboration partners, clinical trial sites or third-party suppliers; the risk that demand for any products may be reduced or no longer exist; risks related to the availability of raw materials to manufacture a vaccine; challenges related to our vaccine's formulation, dosing schedule and attendant storage, distribution and administration requirements, including risks related to storage and handling after delivery by Pfizer; the risk that we may not be able to successfully develop other vaccine formulations, booster doses or potential future annual boosters or re-vaccinations or new variant-based vaccines; the risk that we may not be able to maintain or scale up manufacturing capacity on a timely basis or maintain access to logistics or supply channels commensurate with global demand for our vaccine, which would negatively impact our ability to supply the estimated numbers of doses of our vaccine within the projected time periods as previously indicated; whether and when additional supply agreements will be reached; uncertainties regarding the ability to obtain recommendations from vaccine advisory or technical committees and other public health authorities and uncertainties regarding the commercial impact of any such recommendations; challenges related to public vaccine confidence or awareness; uncertainties regarding the impact of COVID-19 on Pfizer's business, operations and financial results; and competitive developments.

A further description of risks and uncertainties can be found in Pfizer's Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and in its subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors That May Affect Future Results", as well as in its subsequent reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission and available at [www.sec.gov](http://www.sec.gov) and [www.pfizer.com](http://www.pfizer.com).

## **About BioNTech**



Biopharmaceutical New Technologies is a next generation immunotherapy company pioneering novel therapies for cancer and other serious diseases. The Company exploits a wide array of computational discovery and therapeutic drug platforms for the rapid development of novel biopharmaceuticals. Its broad portfolio of oncology product candidates includes individualized and off-the-shelf mRNA-based therapies, innovative chimeric antigen receptor T cells, bi-specific checkpoint immuno-modulators, targeted cancer antibodies and small molecules. Based on its deep expertise in mRNA vaccine development and in-house manufacturing capabilities, BioNTech and its collaborators are developing multiple mRNA vaccine candidates for a range of infectious diseases alongside its diverse oncology pipeline. BioNTech has established a broad set of relationships with multiple global pharmaceutical collaborators, including Genmab, Sanofi, Bayer Animal Health, Genentech, a member of the Roche Group, Regeneron, Genevant, Fosun Pharma, and Pfizer. For more information, please visit [www.BioNTech.de](http://www.BioNTech.de).

### **BioNTech Forward-looking Statements**

This press release contains “forward-looking statements” of BioNTech within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may include, but may not be limited to, statements concerning: BioNTech’s efforts to combat COVID-19; the collaboration between BioNTech and Pfizer including the program to develop a COVID-19 vaccine and COMIRNATY (COVID-19 Vaccine, mRNA) (BNT162b2) (including a rolling submission to amend the Emergency Use Authorization to include children 6 months through 4 years of age in the U.S., the potential of a third dose in children 6 months through 4 years of age, qualitative assessments of available data, potential benefits, expectations for clinical trials, the anticipated timing of regulatory submissions, regulatory approvals or authorizations and anticipated manufacturing, distribution and supply); our expectations regarding the potential characteristics of BNT162b2 in our clinical trials and/or in commercial use based on data observations to date; the ability to produce comparable clinical or other results, including the rate of vaccine effectiveness and safety and tolerability profile observed to date, in additional analyses of the Phase 3 trial and additional studies or in larger, more diverse populations following commercialization; the ability of BNT162b2 to prevent COVID-19 caused by emerging virus variants; the expected time point for additional readouts on efficacy data of BNT162b2 in our clinical trials; the nature of the clinical data, which is subject to ongoing peer review, regulatory review and market interpretation; preclinical and clinical trial data that are subject to differing interpretations and assessments, including during the peer review/publication process, in the scientific community generally, and by regulatory authorities; the widespread use of our vaccine that may lead to new information about efficacy, safety, or other developments, including the risk of additional adverse reactions, some of which may be serious; the timing of submissions to request emergency use or conditional marketing authorizations for a potential booster dose, pediatric populations and/or other biologics license and/or emergency use authorization applications or amendments to any such applications may be filed in particular jurisdictions for BNT162b2 or any other potential vaccines that may arise from the BNT162 program, including a potential variant-based vaccine, and if obtained, whether or when such emergency use authorizations or licenses will expire or terminate; decisions by regulatory authorities that may impact labeling or marketing, manufacturing processes, safety and/or other matters that could affect the availability or commercial potential of our vaccine, including development of products or therapies by other companies; the timing for submission of data for, or receipt of, any marketing approval or emergency use authorization, which will depend on myriad factors, including making a determination as to whether the vaccine’s benefits outweigh its known risks and determination of the vaccine’s efficacy and, if approved, whether it will be commercially successful; our contemplated shipping and storage plan, including our estimated product shelf life at various temperatures; disruptions in the relationships between us and our collaboration partners, clinical trial sites or other third-parties; risks related to the availability of raw materials to manufacture a vaccine; challenges related to our vaccine’s formulation, two-dose schedule and attendant storage, distribution and administration requirements, including risks related to storage and handling after delivery by BioNTech and third-party providers; the ability of BioNTech to supply the quantities of BNT162 to support clinical development and market demand, including our production estimates for 2021; whether and when additional

supply agreements will be reached; challenges related to public vaccine confidence or awareness; and uncertainties regarding the impact of COVID-19 to BioNTech's trials, business and general operations. Any forward-looking statements in this press release are based on BioNTech current expectations and beliefs of future events, and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: the ability to meet the pre-defined endpoints in clinical trials; competition to create a vaccine for COVID-19; the ability to produce comparable clinical or other results, including our stated rate of vaccine effectiveness and safety and tolerability profile observed to date, in the remainder of the trial or in larger, more diverse populations upon commercialization; the ability to effectively scale our productions capabilities; and other potential difficulties.

For a discussion of these and other risks and uncertainties, see BioNTech's Annual Report as Form 20-F for the Year Ended December 31, 2020, filed with the SEC on March 30, 2021, which is available on the SEC's website at [www.sec.gov](http://www.sec.gov). All information in this press release is as of the date of the release, and BioNTech undertakes no duty to update this information unless required by law.

---

<sup>1</sup> Children and COVID-19: State-Level Data Report. American Academy of Pediatrics.

<https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-state-level-data-report/>. Updated January 20, 2022. Accessed January 28, 2022.

<sup>2</sup> Laboratory-Confirmed COVID-19-Associated Hospitalizations. Centers for Disease Control and Prevention. [https://gis.cdc.gov/grasp/covidnet/covid19\\_5.html](https://gis.cdc.gov/grasp/covidnet/covid19_5.html). Updated January 22, 2022. Accessed January 28, 2022.

**Pfizer:**

Media Relations

+1 (212) 733-7410

[PfizerMediaRelations@pfizer.com](mailto:PfizerMediaRelations@pfizer.com)

Investor Relations

+1 (212) 733-4848

[IR@pfizer.com](mailto:IR@pfizer.com)

**BioNTech:**

Media Relations

Jasmina Alatovic

+49 (0)6131 9084 1513

[Media@biontech.de](mailto:Media@biontech.de)

Investor Relations

Sylke Maas, Ph.D.

+49 (0)6131 9084 1074

[Investors@biontech.de](mailto:Investors@biontech.de)

Source: Pfizer Inc.