

July 13, 2022

Novavax, Inc.
Attention: Ms. Kathleen Callahan
21 Firstfield Rd
Gaithersburg, MD 20878

Dear Ms. Callahan:

This letter is in response to a request from Novavax, Inc. that the Food and Drug Administration (FDA) issue an Emergency Use Authorization (EUA) for emergency use of the Novavax COVID-19 Vaccine, Adjuvanted for the prevention of Coronavirus Disease 2019 (COVID-19) for individuals 18 years of age and older, as described in the Scope of Authorization (Section II) of this letter, pursuant to Section 564 of the Federal Food, Drug, and Cosmetic Act (the FD&C Act or the Act) (21 U.S.C. 360bbb-3).

On February 4, 2020, pursuant to Section 564(b)(1)(C) of the Act, the Secretary of the Department of Health and Human Services (HHS) determined that there is a public health emergency that has a significant potential to affect national security or the health and security of United States citizens living abroad, and that involves the virus that causes COVID-19.¹ On the basis of such determination, the Secretary of HHS on March 27, 2020, declared that circumstances exist justifying the authorization of emergency use of drugs and biological products during the COVID-19 pandemic, pursuant to Section 564 of the Act, subject to terms of any authorization issued under that section.²

The Novavax COVID-19 Vaccine, Adjuvanted is for active immunization to prevent COVID-19 caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in individuals 18 years of age and older. The vaccine contains a recombinant spike (rS) protein, and saponin-based adjuvant, Matrix-M. The Novavax COVID-19 Vaccine, Adjuvanted is an investigational vaccine not licensed for any indication.

FDA reviewed safety and efficacy data from an ongoing phase 3 trial in which participants 18 years of age and older were randomized 2:1 to receive two doses of Novavax COVID-19 Vaccine, Adjuvanted or placebo, 3 weeks apart. This study includes pre-crossover and post-crossover periods. In the pre-crossover period, 19,735 participants received Novavax COVID-19 Vaccine, Adjuvanted and 9,847 received saline placebo. In the post-crossover period, 6,416

¹ U.S. Department of Health and Human Services, Determination of a Public Health Emergency and Declaration that Circumstances Exist Justifying Authorizations Pursuant to Section 564(b) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 360bbb-3. February 4, 2020.

² U.S. Department of Health and Human Services, Declaration that Circumstances Exist Justifying Authorizations Pursuant to Section 564(b) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 360bbb-3, 85 FR 18250 (April 1, 2020).

participants received Novavax COVID-19 Vaccine, Adjuvanted and 15,298 received saline placebo. Of participants who received two doses of Novavax COVID-19 Vaccine, Adjuvanted in the pre-crossover period (n=19,111), 78% had a follow-up duration of at least 2 months (median = 2.5 months) after Dose 2. Of the participants who received two doses of Novavax COVID-19 Vaccine, Adjuvanted in the post-crossover period (n= 6,346), 99% had a follow-up duration of at least 2 months (median = 4.4 months) after the last dose. FDA’s review considered the safety and effectiveness data as they relate to the request for emergency use authorization, and did not identify specific safety concerns that would preclude issuance of an EUA. FDA’s analysis of the efficacy data from 25,657 participants 18 years of age and older who did not have evidence of SARS-CoV-2 infection through 6 days after the second dose and who had a median follow-up of 2.5 months after Dose 2 during the pre-crossover period shows that the vaccine was 90.4% effective (95% confidence interval (CI): 83.8%, 94.3%) in preventing PCR-confirmed symptomatic mild, moderate, or severe COVID-19 occurring at least 7 days after Dose 2. Based on these data, and the review of manufacturing information regarding product quality and consistency, it is reasonable to believe that the Novavax COVID-19 Vaccine, Adjuvanted may be effective. Additionally, it is reasonable to conclude, based on the totality of the scientific evidence available, that the known and potential benefits of the Novavax COVID-19 Vaccine, Adjuvanted outweigh its known and potential risks for the prevention of COVID-19 in individuals 18 years of age and older. Finally, on June 7, 2022, the Vaccines and Related Biological Products Advisory Committee voted in agreement with this conclusion.

Having concluded that the criteria for issuance of this authorization under Section 564(c) of the Act are met, I am authorizing the emergency use of the Novavax COVID-19 Vaccine, Adjuvanted for the prevention of COVID-19 as described in the Scope of Authorization section of this letter (Section II) and subject to the terms of this authorization.

I. Criteria for Issuance of Authorization

I have concluded that the emergency use of the Novavax COVID-19 Vaccine, Adjuvanted, for the prevention of COVID-19 when administered as described in the Scope of Authorization (Section II) meets the criteria for issuance of an authorization under Section 564(c) of the Act, because:

- 1) SARS-CoV-2 can cause a serious or life-threatening disease or condition, including severe respiratory illness, to humans infected by this virus;
- 2) Based on the totality of scientific evidence available to FDA, it is reasonable to believe that the Novavax COVID-19 Vaccine, Adjuvanted may be effective in preventing COVID-19, and that, when used under the conditions described in this authorization, the known and potential benefits of the Novavax COVID-19 Vaccine, Adjuvanted when used to prevent COVID-19 outweigh its known and potential risks; and

- 3) There is no adequate, approved, and available alternative³ to the emergency use of the Novavax COVID-19 Vaccine, Adjuvanted to prevent COVID-19.⁴

II. Scope of Authorization

I have concluded, pursuant to Section 564(d)(1) of the Act, that the scope of this authorization is limited as follows:

- Novavax, Inc. will supply the Novavax COVID-19 Vaccine, Adjuvanted through authorized distributor(s)⁵ to emergency response stakeholders⁶ as directed by the U.S. government, including the Centers for Disease Control and Prevention (CDC) and/or other designee, for use consistent with the terms and conditions of this EUA;
- The Novavax COVID-19 Vaccine, Adjuvanted covered by this authorization will be administered by vaccination providers⁷ and used only to prevent COVID-19 in

³ Although Spikevax (COVID-19 Vaccine, mRNA) and Comirnaty (COVID-19 Vaccine, mRNA) are approved to prevent COVID-19 in individuals within the scope of the Novavax COVID-19 Vaccine, Adjuvanted authorization, there are not sufficient quantities of approved vaccine available for distribution to this population in its entirety at the time of reissuance of this EUA. In addition, this vaccine may be an alternative for individuals for whom the approved mRNA COVID-19 vaccines are contraindicated.

⁴ No other criteria of issuance have been prescribed by regulation under Section 564(c)(4) of the Act.

⁵ “Authorized Distributor(s)” are identified by Novavax, Inc. or, if applicable, by a U.S. government entity, such as the Centers for Disease Control and Prevention (CDC) and/or other designee, as an entity or entities allowed to distribute authorized Novavax COVID-19 Vaccine, Adjuvanted.

⁶ For purposes of this letter, “emergency response stakeholder” refers to a public health agency and its delegates that have legal responsibility and authority for responding to an incident, based on political or geographical boundary lines (e.g., city, county, tribal, territorial, State, or Federal), or functional (e.g., law enforcement or public health range) or sphere of authority to administer, deliver, or distribute vaccine in an emergency situation. In some cases (e.g., depending on a state or local jurisdiction’s COVID-19 vaccination response organization and plans), there might be overlapping roles and responsibilities among “emergency response stakeholders” and “vaccination providers” (e.g., if a local health department is administering COVID-19 vaccines; if a pharmacy is acting in an official capacity under the authority of the state health department to administer COVID-19 vaccines). In such cases, it is expected that the conditions of authorization that apply to emergency response stakeholders and vaccination providers will all be met.

⁷ For purposes of this letter, “vaccination provider” refers to the facility, organization, or healthcare provider licensed or otherwise authorized by the emergency response stakeholder (e.g., non-physician healthcare professionals, such as nurses and pharmacists pursuant to state law under a standing order issued by the state health officer) to administer or provide vaccination services in accordance with the applicable emergency response stakeholder’s official COVID-19 vaccination and emergency response plan(s) and who is enrolled in the CDC COVID-19 Vaccination Program. If the vaccine is exported from the United States, a “vaccination provider” is a provider that is authorized to administer this vaccine in accordance with the laws of the country in which it is administered. For purposes of this letter, “healthcare provider” also refers to a person authorized by the U.S. Department of Health and Human Services (e.g., under the PREP Act Declaration for Medical Countermeasures against COVID-19) to administer FDA-authorized COVID-19 vaccine (e.g., qualified pharmacy technicians and State-authorized pharmacy interns acting under the supervision of a qualified pharmacist). See, e.g., HHS. *Fourth Amendment to the Declaration Under the Public Readiness and Emergency Preparedness Act for Medical Countermeasures Against COVID-19 and Republication of the Declaration*. 85 FR 79190 (December 9, 2020).

individuals ages 18 and older with a two-dose primary series given 3 weeks apart; and

- The Novavax COVID-19 Vaccine, Adjuvanted may be administered by a vaccination provider without an individual prescription for each vaccine recipient.

Product Description

The Novavax COVID-19 Vaccine, Adjuvanted is supplied as a suspension in multi-dose vials. The Novavax COVID-19 Vaccine, Adjuvanted does not contain a preservative.

The primary series is two doses (0.5 mL each) given 3 weeks apart.

Each 0.5 mL dose of the Novavax COVID-19 Vaccine, Adjuvanted is formulated to contain 5 mcg of SARS-CoV-2 recombinant spike (rS) protein and 50 mcg Matrix-M adjuvant. The Matrix M adjuvant is composed of Fraction-A (42.5 mcg) and Fraction-C (7.5 mcg) of saponin extracts from the soapbark tree, *Quillaja saponaria* Molina. Each dose of the Novavax COVID-19 Vaccine, Adjuvanted also includes the following ingredients: cholesterol (30.5 mcg), phosphatidylcholine (23 mcg), potassium dihydrogen phosphate (3.85 mcg), potassium chloride (2.25 mcg), disodium hydrogen phosphate dihydrate (14.7 mcg), disodium hydrogen phosphate heptahydrate (2.465 mg), sodium dihydrogen phosphate monohydrate (0.445 mg), sodium chloride (8.856 mg), and polysorbate 80 (0.05 mg) in sterile Water for Injection. The pH is adjusted with sodium hydroxide or hydrochloric acid.

The manufacture of the authorized Novavax COVID-19 Vaccine, Adjuvanted is limited to those facilities identified and agreed upon in Novavax Inc.'s request for authorization.

The Novavax COVID-19 Vaccine, Adjuvanted vial label and carton labels are clearly marked for “Emergency Use Authorization.” The Novavax COVID-19 Vaccine, Adjuvanted is authorized to be distributed, stored, further redistributed, and administered by emergency response stakeholders when packaged in the authorized manufacturer packaging (i.e., vials and cartons), despite the fact that the vial and carton labels may not contain information that otherwise would be required under the FD&C Act.

The Novavax COVID-19 Vaccine, Adjuvanted is authorized for emergency use with the following product-specific information required to be made available to vaccination providers and recipients, respectively (referred to as “authorized labeling”):

- Fact Sheet for Healthcare Providers Administering Vaccine (Vaccination Providers): Emergency Use Authorization (EUA) of the Novavax COVID-19 Vaccine, Adjuvanted to Prevent Coronavirus Disease 2019 (COVID-19)
- Fact Sheet for Recipients and Caregivers: Emergency Use Authorization (EUA) of the Novavax COVID-19 Vaccine, Adjuvanted to Prevent Coronavirus Disease 2019 (COVID-19)

I have concluded, pursuant to Section 564(d)(2) of the Act, that it is reasonable to believe that the known and potential benefits of the Novavax COVID-19 Vaccine, Adjuvanted, when used to prevent COVID-19 and used in accordance with this Scope of Authorization (Section II), outweigh its known and potential risks.

I have concluded, pursuant to Section 564(d)(3) of the Act, based on the totality of scientific evidence available to FDA, that it is reasonable to believe that the Novavax COVID-19 Vaccine, Adjuvanted may be effective in preventing COVID-19 when used in accordance with this Scope of Authorization (Section II), pursuant to Section 564(c)(2)(A) of the Act.

Having reviewed the scientific information available to FDA, including the information supporting the conclusions described in Section I above, I have concluded that the Novavax COVID-19 Vaccine, Adjuvanted (as described in this Scope of Authorization (Section II)) meets the criteria set forth in Section 564(c) of the Act concerning safety and potential effectiveness.

The emergency use of the Novavax COVID-19 Vaccine, Adjuvanted under this EUA must be consistent with, and may not exceed, the terms of the Authorization, including the Scope of Authorization (Section II) and the Conditions of Authorization (Section III). Subject to the terms of this EUA and under the circumstances set forth in the Secretary of HHS's determination under Section 564(b)(1)(C) described above and the Secretary of HHS's corresponding declaration under Section 564(b)(1), the Novavax COVID-19 Vaccine, Adjuvanted is authorized to prevent COVID-19 in individuals 18 years of age and older as described in the Scope of Authorization (Section II) under this EUA, despite the fact that it does not meet certain requirements otherwise required by applicable federal law.

III. Conditions of Authorization

Pursuant to Section 564 of the Act, I am establishing the following conditions on this authorization:

Novavax, Inc. and Authorized Distributor(s)

- A. Novavax, Inc. and authorized distributor(s) will ensure that the authorized Novavax COVID-19 Vaccine, Adjuvanted is distributed, as directed by the U.S. government, including CDC and/or other designee, and the authorized labeling (i.e., Fact Sheets) is made available to vaccination providers, recipients, and caregivers, consistent with the terms of this letter.
- B. Novavax, Inc. and authorized distributor(s) will ensure that appropriate storage and cold chain is maintained until delivered to emergency response stakeholders' receipt sites.
- C. Novavax, Inc. will ensure that the terms of this EUA are made available to all relevant stakeholders (e.g., emergency response stakeholders, authorized distributors, and vaccination providers) involved in distributing or receiving the authorized Novavax COVID-19 Vaccine, Adjuvanted. Novavax, Inc. will provide to all relevant stakeholders a copy of this letter of authorization and communicate any subsequent

amendments that might be made to this letter of authorization and its authorized labeling.

- D. Novavax, Inc. may develop and disseminate instructional and educational materials (e.g., video regarding vaccine handling, storage/cold-chain management, preparation, disposal) that are consistent with the authorized emergency use of the vaccine as described in the letter of authorization and authorized labeling, without FDA’s review and concurrence, when necessary to meet public health needs during an emergency. Any instructional and educational materials that are inconsistent with the authorized labeling are prohibited.
- E. Novavax, Inc. may request changes to this authorization, including to the authorized Fact Sheets for the Novavax COVID-19 Vaccine, Adjuvanted. Any request for changes to this EUA must be submitted to the Office of Vaccines Research and Review (OVR)R)/Center for Biologics Evaluation and Research (CBER). Such changes require appropriate authorization prior to implementation.⁸
- F. Novavax, Inc. will report to Vaccine Adverse Event Reporting System (VAERS):
- Serious adverse events (irrespective of attribution to vaccination);
 - Cases of Multisystem Inflammatory Syndrome in adults; and
 - Cases of COVID-19 that result in hospitalization or death, that are reported to Novavax, Inc.
- These reports should be submitted to VAERS as soon as possible but no later than 15 calendar days from initial receipt of the information by Novavax, Inc.
- G. Novavax, Inc. must submit to Investigational New Drug application (IND) number 22430 periodic safety reports at monthly intervals in accordance with a due date agreed upon with the Office of Biostatistics and Pharmacovigilance (OBPV)/CBER, beginning after the first full calendar month after authorization. Each periodic safety report is required to contain descriptive information which includes:
- A narrative summary and analysis of adverse events submitted during the reporting interval, including interval and cumulative counts by age groups, special populations (e.g., pregnant women), and adverse events of special interest;
 - A narrative summary and analysis of vaccine administration errors, whether or not associated with an adverse event, that were identified since the last reporting interval;
 - Newly identified safety concerns in the interval; and

⁸ The following types of revisions may be authorized without reissuing this letter: (1) changes to the authorized labeling; (2) non-substantive editorial corrections to this letter; (3) new types of authorized labeling, including new fact sheets; (4) new carton/container labels; (5) expiration dating extensions; (6) changes to manufacturing processes, including tests or other authorized components of manufacturing; (7) new conditions of authorization to require data collection or study. All changes to the authorization require review and concurrence from OVR. For changes to the authorization, including the authorized labeling, of the type listed in (3), (6), or (7), review and concurrence is also required from the Preparedness and Response Team (PREP)/Office of the Center Director (OD)/CBER and the Office of Counterterrorism and Emerging Threats (OCET)/Office of the Chief Scientist (OCS).

- Actions taken since the last report because of adverse experiences (for example, changes made to Healthcare Providers Administering Vaccine (Vaccination Providers) Fact Sheet, changes made to studies or studies initiated).
- H. No changes will be implemented to the description of the product, manufacturing process, facilities, or equipment without notification to and concurrence by the Agency.
- I. All manufacturing facilities will comply with Current Good Manufacturing Practice requirements.
- J. Novavax, Inc. will submit to the EUA file Certificates of Analysis (CoA) for each drug product lot at least 48 hours prior to vaccine distribution. The CoA will include the established specifications and specific results for each quality control test performed on the final drug product lot.
- K. Novavax, Inc. will submit to the EUA file quarterly manufacturing reports that include a listing of all drug substance and drug product lots produced after issuance of this authorization. This report must include lot number, manufacturing site, date of manufacture, and lot disposition, including those lots that were quarantined for investigation or those lots that were rejected. Information on the reasons for lot quarantine or rejection must be included in the report. The first report is due October 13, 2022.
- L. Novavax, Inc. and authorized distributor(s) will maintain records regarding release of Novavax COVID-19 Vaccine, Adjuvanted for distribution (i.e., lot numbers, quantity, release date).
- M. Novavax, Inc. and authorized distributor(s) will make available to FDA upon request any records maintained in connection with this EUA.
- N. Novavax, Inc. will conduct post-authorization observational studies to evaluate the association between Novavax COVID-19 Vaccine, Adjuvanted and a pre-specified list of adverse events of special interest, including myocarditis and pericarditis, along with deaths and hospitalizations, and severe COVID-19. The study population should include individuals administered the authorized Novavax COVID-19 Vaccine, Adjuvanted under this EUA in the general U.S. population (18 years of age and older), populations of interest such as healthcare workers, pregnant women, immunocompromised individuals, subpopulations with specific comorbidities. The studies should be conducted in large scale databases with an active comparator. Novavax, Inc. will provide protocols and status update reports to the IND 22430 with agreed-upon study designs and milestone dates.

Emergency Response Stakeholders

- O. Emergency response stakeholders will identify vaccination sites to receive authorized Novavax COVID-19 Vaccine, Adjuvanted and ensure its distribution and

administration, consistent with the terms of this letter and CDC’s COVID-19 Vaccination Program.

- P. Emergency response stakeholders will ensure that vaccination providers within their jurisdictions are aware of this letter of authorization, and the terms herein and any subsequent amendments that might be made to the letter of authorization, instruct them about the means through which they are to obtain and administer the vaccine under the EUA, and ensure that the authorized labeling [i.e., Fact Sheet for Healthcare Providers Administering Vaccine (Vaccination Providers) and Fact Sheet for Recipients and Caregivers] is made available to vaccination providers through appropriate means (e.g., e-mail, website).
- Q. Emergency response stakeholders receiving authorized Novavax COVID-19 Vaccine, Adjuvanted will ensure that appropriate storage and cold chain is maintained.

Vaccination Providers

- R. Vaccination providers will administer the vaccine in accordance with the authorization and will participate and comply with the terms and training required by CDC’s COVID-19 Vaccination Program.
- S. Vaccination providers will provide the Fact Sheet for Recipients and Caregivers to each individual receiving vaccination and provide the necessary information for receiving their second dose.
- T. Vaccination providers administering the Novavax COVID-19 Vaccine, Adjuvanted must report the following information associated with the administration of the Novavax COVID-19 Vaccine, Adjuvanted of which they become aware to VAERS in accordance with the Fact Sheet for Healthcare Providers Administering Vaccine (Vaccination Providers):
 - Vaccine administration errors whether or not associated with an adverse event
 - Serious adverse events (irrespective of attribution to vaccination)
 - Cases of Multisystem Inflammatory Syndrome in adults
 - Cases of COVID-19 that result in hospitalization or deathComplete and submit reports to VAERS online at <https://vaers.hhs.gov/reportevent.html>. The VAERS reports should include the words “Novavax COVID-19 Vaccine, Adjuvanted EUA” in the description section of the report. More information is available at vaers.hhs.gov or by calling 1-800-822-7967. To the extent feasible, report to Novavax, Inc. by contacting 1-844-668-2829 or by providing a copy of the VAERS form to Novavax, Inc.; Fax: 1-888-988-8809.
- U. Vaccination providers will conduct any follow-up requested by the U.S. government, including CDC, FDA, or other designee, regarding adverse events to the extent feasible given the emergency circumstances.

- V. Vaccination providers will monitor and comply with CDC and/or emergency response stakeholder vaccine management requirements (e.g., requirements concerning obtaining, tracking, and handling vaccine) and with requirements concerning reporting of vaccine administration data to CDC.
- W. Vaccination providers will ensure that any records associated with this EUA are maintained until notified by FDA. Such records will be made available to CDC, and FDA for inspection upon request.

Conditions Related to Printed Matter, Advertising, and Promotion

- X. All descriptive printed matter, advertising, and promotional material, relating to the use of the Novavax COVID-19 Vaccine, Adjuvanted shall be consistent with the authorized labeling, as well as the terms set forth in this EUA, and meet the requirements set forth in section 502(a) and (n) of the FD&C Act and FDA implementing regulations.
- Y. All descriptive printed matter, advertising, and promotional material relating to the use of the Novavax COVID-19 Vaccine, Adjuvanted clearly and conspicuously shall state that:
 - This product has not been approved or licensed by FDA, but has been authorized for emergency use by FDA, under an EUA to prevent Coronavirus Disease 2019 (COVID-19) for use in individuals 18 years of age and older; and
 - The emergency use of this product is 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.

Condition Related to Export

- Z. If the Novavax COVID-19 Vaccine, Adjuvanted is exported from the United States, conditions C, D, and O through Y do not apply, but export is permitted only if 1) the regulatory authorities of the country in which the vaccine will be used are fully informed that this vaccine is subject to an EUA and is not approved or licensed by FDA and 2) the intended use of the vaccine will comply in all respects with the laws of the country in which the product will be used. The requirement in this letter that the authorized labeling (i.e., Fact Sheets) be made available to vaccination providers, recipients, and caregivers in condition A will not apply if the authorized labeling (i.e., Fact Sheets) are made available to the regulatory authorities of the country in which the vaccine will be used.

IV. Duration of Authorization

This EUA will be effective until the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic is terminated under Section 564(b)(2) of the Act or the EUA is revoked under Section 564(g) of the Act.

Sincerely,

--/S/--

Jacqueline A. O'Shaughnessy, Ph.D.
Acting Chief Scientist
Food and Drug Administration

Enclosures