



November 8, 2022

Swedish Orphan Biovitrum AB
c/o Advyzom LLC
Rula Ibrahim-Saker, PharmD
U.S. Agent
335 Snyder Ave.
Berkeley Heights, NJ 07922

RE: Emergency Use Authorization 109

Dear Dr. Ibrahim-Saker:

This letter is in response to Swedish Orphan Biovitrum AB's (Sobi) request that the Food and Drug Administration (FDA or Agency) issue an Emergency Use Authorization (EUA) for the emergency use of Kineret (anakinra) for the treatment of coronavirus disease 2019 (COVID-19) in certain hospitalized patients, pursuant to Section 564 of the Federal Food, Drug, and Cosmetic Act (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 coronavirus disease 2019 (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 (21 U.S.C. 360bbb-3), subject to terms of any authorization issued under that section.²

Kineret is an Interleukin-1 (IL-1) receptor antagonist. IL-1 is involved in inflammatory diseases and additionally, IL-1 is linked to acute severe lung inflammation in COVID-19. Kineret is FDA-approved for several indications³; however, Kineret is not approved for the treatment of COVID-19.

Based on the totality of scientific evidence available to FDA, including data from the clinical trial SAVE-MORE (NCT04680949): a randomized, double-blind, placebo-controlled study to

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).

³ The FDA-approved labeling for Kineret (anakinra) may be found at:
https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/103950s51891b1.pdf

evaluate the safety and efficacy of Kineret in adult (≥ 18 years) patients with COVID-19 pneumonia who were at risk of developing severe respiratory failure, it is reasonable to believe that Kineret may be effective for the treatment of COVID-19 in hospitalized adults with positive results of direct SARS-CoV-2 viral testing with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk of progressing to severe respiratory failure and likely to have an elevated plasma soluble urokinase plasminogen activator receptor (suPAR), as described in the Scope of Authorization (Section II), and when used under the conditions described in this authorization, the known and potential benefits of Kineret outweigh the known and potential risks of such product.

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 Kineret for the treatment COVID-19 in certain hospitalized adults, 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 Kineret for the treatment 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 Kineret may be effective for the treatment of COVID-19 in hospitalized adults with positive results of direct SARS-CoV-2 viral testing with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk of progressing to severe respiratory failure and likely to have an elevated suPAR, as described in the Scope of Authorization (Section II), and that, when used under the conditions described in this authorization, the known and potential benefits of Kineret outweigh the known and potential risks of such product; and
3. There is no adequate, approved, and available alternative to the emergency use of Kineret for the treatment of COVID-19 in hospitalized adults with positive results of direct SARS-CoV-2 viral testing with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk of progressing to severe respiratory failure and likely to have an elevated suPAR.^{4,5}

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

⁵ Veklury (remdesivir), a SARS-CoV-2 nucleotide analog RNA polymerase inhibitor, is an FDA-approved alternative for the treatment of COVID-19 in hospitalized adults with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk of progressing to severe respiratory failure. Veklury has demonstrated antiviral activity against SARS-CoV-2; whereas Kineret is an IL-1 receptor antagonist that blocks the IL-1 signaling pathway, which is involved in inflammatory diseases and thought to contribute to inflammation and worsening of COVID-19, offering a different mechanism of action. Olumiant (baricitinib), a Janus kinase (JAK) inhibitor, is an FDA-approved alternative for the treatment of COVID-19 in hospitalized adults with pneumonia requiring

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:

- Kineret may only be used by healthcare providers to treat COVID-19 in hospitalized adults with positive results of direct SARS-CoV-2 viral testing with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk for progressing to severe respiratory failure and are likely to have an elevated suPAR.⁶
- The use of Kineret covered by this authorization must be in accordance with the authorized Fact Sheets.

Product Description

The authorized Kineret is supplied in a single-use preservative free, prefilled glass syringe with a 29-gauge needle. Each prefilled glass syringe contains 100 mg of Kineret per 0.67 mL. Kineret is distributed in a 1 x 7 syringe dispensing pack containing 7 syringes (NDC 66658-234-07). Kineret is to be administered by subcutaneous injection.

The authorized storage and handling information for Kineret is included in the authorized Fact Sheet for Healthcare Providers.

Kineret is authorized for emergency use with the following product-specific information required to be made available to healthcare providers and to patients and caregivers, respectively, through Sobi's website at www.KineretRxHCP.com/EUA (referred to as the "authorized labeling"):

- Fact Sheet for Healthcare Providers: Emergency Use Authorization (EUA) for Kineret
- Fact Sheet for Patients and Caregivers: Emergency Use Authorization (EUA) of Kineret for 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 Kineret, when used for the treatment of COVID-19 and used in accordance with this Scope of Authorization (Section II), outweigh the 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 Kineret may be effective for the

supplemental oxygen and non-invasive ventilation. Kineret offers an alternative mechanism of action as an IL-1 receptor antagonist. IL-1 is another component of the complex hyperinflammatory response thought to contribute to worsening of COVID-19. In addition, Kineret has a subcutaneous route of administration; whereas, Olumiant is available as tablets, offering an alternative route of administration to some patients who are hospitalized (e.g. for patients who are unable to swallow tablets).

⁶ See Section 1.1 of the authorized Fact Sheet for Healthcare Providers for criteria to identify patients who are at risk of progressing to severe respiratory failure and likely to have an elevated suPAR.

treatment of 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 Kineret (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 Kineret 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), Kineret is authorized for the treatment of COVID-19 in hospitalized adults with positive results of direct SARS-CoV-2 viral testing with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk for progressing to severe respiratory failure and are likely to have an elevated suPAR, 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:

Sobi and Authorized Distributors⁷

- A. Sobi and authorized distributor(s) will ensure that Kineret is distributed and the authorized labeling (i.e., Fact Sheets) will be made available to healthcare facilities and/or healthcare providers as described in Section II of this Letter of Authorization.
- B. Sobi and authorized distributor(s) will ensure that appropriate storage is maintained until the product is delivered to healthcare facilities and/or healthcare providers.
- C. Sobi and authorized distributor(s) will ensure that the terms of this EUA are made available to all relevant stakeholders (e.g., U.S. government agencies, state and local government authorities, authorized distributors, healthcare facilities, healthcare providers) involved in distributing or receiving Kineret. Sobi 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 accompanying materials (i.e., Fact Sheets).
- D. Sobi may request changes to this authorization, including to the authorized Fact Sheets for Kineret. Any request for changes to this EUA must be submitted to the Office of

⁷ “Authorized Distributor(s)” are identified by Sobi as an entity or entities allowed to distribute the authorized Kineret.

Immunology and Inflammation/Office of New Drugs/Center for Drug Evaluation and Research. Such changes require appropriate authorization prior to implementation.⁸

- E. Sobi may develop and disseminate instructional and educational materials (e.g., materials providing information on product administration and/or patient monitoring) that are consistent with the authorized emergency use of Kineret as described in this Letter of Authorization and authorized labeling, without FDA’s review and concurrence, when necessary to meet public health needs. Any instructional and educational materials that are inconsistent with the authorized labeling for Kineret are prohibited. If the Agency notifies Sobi that any instructional and educational materials are inconsistent with the authorized labeling, Sobi must cease distribution of such instructional and educational materials. Furthermore, as part of its notification, the Agency may also require Sobi to issue corrective communication(s).
- F. Sobi will report to FDA all serious adverse events and medication errors potentially related to Kineret use that are reported to Sobi using either of the following options.

Option 1: Submit reports through the Safety Reporting Portal (SRP) as described on the [FDA SRP](#) web page.

Option 2: Submit reports directly through the Electronic Submissions Gateway (ESG) as described on the [FAERS electronic submissions](#) web page.

Submitted reports under both options must state: “Kineret use for COVID-19 under Emergency Use Authorization (EUA).” For reports submitted under Option 1, include this language at the beginning of the question “Describe Event” for further analysis. For reports submitted under Option 2, include this language at the beginning of the “Case Narrative” field.

- G. All manufacturing, packaging, and testing sites for both drug substance and drug product used for EUA supply will comply with current good manufacturing practice requirements of Section 501(a)(2)(B) of the Act.
- H. Sobi will submit information to the Agency within three working days of receipt of any information concerning significant quality problems with drug product distributed under this EUA for Kineret that includes the following:

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; (8) new strengths of the authorized product, new product sources (e.g., of active pharmaceutical ingredient) or of product components. For changes to the authorization, including the authorized labeling, of the type listed in (3), (6), (7), or (8), review and concurrence is required from the Counter-Terrorism and Emergency Coordination Staff/Office of the Center Director/CDER and the Office of Counterterrorism and Emerging Threats/Office of the Chief Scientist.

- Information concerning any incident that causes the drug product or its labeling to be mistaken for, or applied to, another article; or
- Information concerning any microbiological contamination, or any significant chemical, physical, or other change or deterioration in the distributed drug product, or any failure of one or more distributed batches of the product to meet the established specifications.

If a significant quality problem affects unreleased product and may also impact product(s) previously released and distributed, then information must be submitted for all potentially impacted lots.

Sobi will include in its notification to the Agency whether the batch, or batches, in question will be recalled.

If not included in its initial notification, Sobi must submit information confirming that Sobi has identified the root cause of the significant quality problems, taken corrective action, and provide a justification confirming that the corrective action is appropriate and effective. Sobi must submit this information as soon as possible but no later than 45 calendar days from the initial notification.

- I. Sobi will manufacture Kineret to meet all quality standards and per the manufacturing process and control strategy as detailed in Sobi's EUA request. Sobi will not implement any changes to the description of the product, manufacturing process, facilities and equipment, and elements of the associated control strategy that assure process performance and quality of the authorized product, without notification to and concurrence by the Agency as described under Condition D.
- J. Through a process of inventory control, Sobi and authorized distributor(s) will maintain records regarding distribution of Kineret (i.e., lot numbers, quantity, receiving site, receipt date).
- K. Sobi must provide the following information to the Agency:
 1. Sobi will provide the necessary data and/or information validating the use of the alternative patient identification method to suPAR⁹ at baseline in patients with positive direct SARS-CoV-2 viral testing, who are hospitalized, requiring oxygen, with evidence of COVID-19 pneumonia. Sobi will pre-specify the analyses to examine the correlation, sensitivity, specificity, positive predictive value, and negative predictive value, between suPAR and the alternative patient identification method. Sobi must submit a data analysis plan no later than January 31, 2023. Sobi must submit a final analysis report no later than May 31, 2023.
 2. Sobi will provide the data and/or information necessary to support the submission of a marketing application under the appropriate regulatory pathway, as determined by the Center for Devices and Radiological Health

⁹ Supra at Note 6.

(CDRH), for a suPAR test for commercial use in the United States. Sobi has agreed to submit a marketing application to CDRH no later than January 31, 2025.

- L. Sobi and authorized distributor(s) will make available to FDA upon request any records maintained in connection with this EUA.

Healthcare Facilities to Whom Kineret Is Distributed and Healthcare Providers Administering Kineret

- M. Healthcare facilities and healthcare providers will ensure that they are aware of the Letter of Authorization, and the terms herein, and that the authorized Fact Sheets are made available to healthcare providers and to patients and caregivers, respectively, through appropriate means, prior to administration of Kineret as described in the Scope of Authorization (Section II) under this EUA.
- N. Healthcare facilities and healthcare providers receiving Kineret will track all serious adverse events and medication errors that are considered to be potentially related to Kineret use and must report these to FDA in accordance with the Fact Sheet for Healthcare Providers. Complete and submit a MedWatch form (www.fda.gov/medwatch/report.htm), or complete and submit FDA Form 3500 (health professional) by fax (1-800-FDA-0178) (these forms can be found via link above). Call [1-800-FDA-1088](tel:1-800-FDA-1088) for questions. Submitted reports must state, “Kineret use for COVID-19 under Emergency Use Authorization” at the beginning of the question “Describe Event” for further analysis. A copy of the completed FDA Form 3500 must also be provided to Sobi per the instructions in the authorized labeling.
- O. Healthcare facilities and healthcare providers will ensure that appropriate storage is maintained until the product is administered consistent with the terms of this letter and the authorized labeling.
- P. Through a process of inventory control, healthcare facilities will maintain records regarding the dispensing and administration of Kineret for the use authorized in this letter (i.e., lot numbers, quantity, receiving site, receipt date), product storage, and maintain patient information (e.g., patient name, age, disease manifestation, number of doses administered per patient, other drugs administered).
- Q. Healthcare facilities will ensure that any records associated with this EUA are maintained until notified by Sobi and/or FDA. Such records will be made available to Sobi, HHS, and FDA for inspection upon request.

Conditions Related to Printed Matter, Advertising, and Promotion

- R. All descriptive printed matter, advertising, and promotional materials relating to the use of Kineret under this authorization 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 Act, as applicable, and FDA implementing regulations. References to “approved

labeling”, “permitted labeling”, or similar terms in these requirements shall be understood to refer to the authorized labeling for the use of Kineret under this authorization. In addition, such materials shall:

- Be tailored to the intended audience.
 - Not take the form of reminder advertisements, as that term is described in 21 CFR 202.1(e)(2)(i), 21 CFR 200.200 and 21 CFR 201.100(f).
 - Present the same risk information relating to the major side effects and contraindications concurrently in the audio and visual parts of the presentation for advertising and promotional materials in audio-visual format.
 - Be accompanied by the authorized labeling, if the promotional materials are not subject to Section 502(n) of the Act.
 - Be submitted to FDA accompanied by Form FDA-2253 for consideration at least 14 calendar days prior to initial dissemination or first use.
- S. Sobi may disseminate descriptive printed matter, advertising, and promotional materials relating to the emergency use of Kineret that provide accurate descriptions of safety results and efficacy results on a clinical endpoint(s) from the clinical trial(s) summarized in the authorized labeling. Such materials must include any limitations of the clinical trial data as described in the authorized labeling. Sobi may not imply that Kineret is FDA-approved for its authorized use by making statements such as “Kineret is safe and effective for the treatment of COVID-19.”
- T. All descriptive printed matter, advertising, and promotional material, relating to the use of Kineret under this authorization clearly and conspicuously shall state that:
- Kineret has not been approved, but has been authorized for emergency use by FDA under an EUA, for the treatment of COVID-19 in hospitalized adults with positive results of direct SARS-CoV-2 viral testing with pneumonia requiring supplemental oxygen (low- or high-flow oxygen) who are at risk of progressing to severe respiratory failure and likely to have an elevated suPAR; and
 - The emergency use of Kineret is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner.

If the Agency notifies Sobi that any descriptive printed matter, advertising, or promotional materials do not meet the terms set forth in Conditions R through T of this EUA, Sobi must cease distribution of such descriptive printed matter, advertising, or promotional materials in accordance with the Agency’s notification. Furthermore, as part of its notification, the Agency may also require Sobi to issue corrective communication(s).

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/--

Patrizia Cavazzoni, M.D.
Director
Center for Drug Evaluation and Research
U.S. Food and Drug Administration