Submitted by electronic mail

August 9, 2022

The Honorable Xavier Becerra
Secretary
U.S. Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dr. Robert Califf
Commissioner
U.S. Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993

Dear Secretary Becerra and Commissioner Califf,

I am writing regarding the decision by the Food and Drug Administration (FDA) to administer JYNNEOS intradermally (ID) under an Emergency Use Authorization (EUA) as a dose-sparing measure. Bavarian Nordic (BN) is dedicated to assisting Governments around the globe to control the current monkeypox outbreak and is fully supportive of dose-sparing approaches, such as delaying the second vaccination. However, we do have some reservations on the ID approach, due to the very limited safety data available (<200 people), the higher reactogenicity compared to the JYNNEOS standard dose and route (subcutaneous [SC]), and the fact that there was a relatively high percentage of subjects (20%) that failed to receive the second vaccination during a controlled clinical study. We have been made aware of some additional analysis of the ID study data, but essentially this does not change the overall picture that the ID administration results in increased reactogenicity compared to SC and this may have a negative impact on vaccine uptake and coverage.

For these reasons, we believed it would have been prudent that the rollout of the EUA be supported by an implementation protocol. Such a protocol would not delay the rollout, in our opinion, but would allow additional safety data to be collected on the ID administration, together with the acceptability of vaccinees to this approach. It is our understanding that it is the United States Government position that there is no time to prepare or conduct such a protocol. Therefore, as the manufacturer of JYNNEOS, we have already begun discussions with investigators on the feasibility of how to conduct a study to provide more safety information to help govern future vaccination policies.

Since last Thursday, we have been inundated with calls from U.S. state government officials with questions and concerns regarding the ID administration (e.g., *How many times can a syringe be inserted through the stopper? How long do we have to use the 5 doses in each vial – 1 hour, 6 hours? Does the vial go back into the fridge in between doses? How long is the vaccine viable after the initial dose has been removed? Is 0.1mL adequate for both PrEP and PEP purposes? What gauge needle do we use? How to handle misadministration?*). We will of course align our responses with our colleagues at the CDC, but we believe this alignment would have been better served before any announcement to ensure the best rollout of the EUA.

While we have certain reservations, we are trying to find the best way to support the EUA by collecting additional data and aligning on the responses to assist state officials in the rollout. We are also investing in expanding the manufacturing capacity at both BN and external facilities, with likely more announcements soon to come. Lastly, we are testing the potency of older JYNNEOS batches stored at the SNS. In our in-house stability program, two-thirds of the batches we tested that were manufactured in 2014 are still within specification and so we are hopeful that many of the eleven 2014 batches (approximately 1 million doses) at the SNS will also still be within specification. We will know in the coming days and weeks and will work with the authorities to expedite the availability of these batches in the fight against monkeypox.

Please feel free to reach out to me any time.

Sincerely,

Paul Chaplin
President & CEO

cc:
Robert Fenton, White House National Monkeypox Response Coordinator
Demetre Daskalakis, White House National Monkeypox Response Deputy Coordinator
Raj Panjabi, White House Senior Director for Global Health Security and Biodefense
Dawn O'Connell, Assistant Secretary for Preparedness and Response, U.S. Department of Health and Human Services
Gary Disbrow, Director, Biomedical Advanced Research and Development Authority