



Information Request

Our Reference: STN: 125752/2

Information Request #38

Date: December 16, 2021

To: **Michelle Olsen, Ph.D.**
ModernaTX, Inc.
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From: **Joseph Kulinski, Ph.D.**
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Product: COVID-19 Vaccine, mRNA (SPIKEVAX)

Subject: CMC Information

Our review of your August 16, 2021 submission (STN 125752/1) is ongoing and we have the following requests for information regarding CMC information:

CX-024414 mRNA:

1. Please clarify which container closure system is used to store the linearized pDNA template lots manufactured at Aldevron and the containers used to store samples from the (b) (4) lots of pDNA template placed in the Aldevron long-term stability studies at $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
2. We reviewed the updated long-term stability data submitted in Amendment 29 on December 6, 2021 in response to our Information Request (IR) #25 dated November 29, 2021. Based on the available stability results for CX-024414 mRNA stored at $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$, please (b) (4) the proposed shelf-life for this intermediate (b) (4) and update BLA section 3.2.S.7 *Stability {CX-024414 mRNA}* accordingly. The shelf life may be extended to (b) (4) post approval when supportive data become available.
3. In Tables 1 and 2 of section 3.2.S.7.3 *Stability Data {CX-024414}*, the links to the stability reports correspond to CX-024414 mRNA Certificates of Analysis rather than to the stability reports referenced in this section. Please correct as appropriate.

(b) (4)

4. Regarding the updated long-term stability data submitted in Amendment 29, in section 3.2.S.7.3 *Stability Data* {(b) (4)} Table 2 (b) (4) *Registration Stability Data*, we note that lot (b) (4) manufactured in process (b) (4) was added. However, no stability data or supportive CMC information were provided regarding the use of (b) (4). Please clarify whether (b) (4) will be used for commercial manufacture.

mRNA-1273 LNP DS:

5. Based on the available stability results submitted in Amendment 29 for mRNA-1273 LNP DS lots stored at -60°C to -90°C, please (b) (4) the proposed shelf life for the commercial mRNA-1273 LNP DS lots from (b) (4) and update BLA section 3.2.S.7 *Stability {mRNA-1273 LNP} accordingly*. The shelf life may be extended to (b) (4) post approval when supportive data become available.

(b) (4)

6. With regard to your response to item 5 in IR #25 dated November 29, 2021, you indicated that implementation of a (b) (4) step will be requested as an amendment to the BLA. We request that the implementation of this change be submitted as a prior approval supplement, post regulatory action on the BLA.

Please confirm your receipt of this request and submit your response as an amendment to STN 125752 as soon as possible but no later than December 28, 2021.

Please contact me if you have questions and include Sudhakar Agnihothram (sudhakar.agnihothram@fda.hhs.gov) and Josephine Resnick (josephine.resnick@fda.hhs.gov) on all communications.