RESPONSE TO FDA COMMENTS ON INFORMATION REQUEST #30 DECEMBER 10, 2021

The Sponsor acknowledges FDA Comments on Information Request #30 dated 10 DECEMBER 2021 in (**BOLD**)

Product: COVID-19 Vaccine, mRNA (SPIKEVAX)

Subject: Unsolicited AEs

Our review of your August 24, 2021 submission (STN 125752/2) is ongoing. We have the following request for additional information regarding unsolicited adverse events.

ITEM 1:
1. For the cases of facial paralysis/Bell's palsy in the mRNA-1273 group and the placebo arm of Part A, please provide the following information:
a. Onset of facial paralysis/Bell's palsy relative to the most recent vaccination, including whether it followed dose 1 or dose 2.
b. Other underlying risk factors that could be associated with Bell's palsy.

Sponsor Response:

The Sponsor has provided an excel file with the list of participants with an AE of Bell's Palsy or facial paralysis for mRNA-1273 (n=8) and placebo (n=3) recipients during the overall period in the mRNA-1273 P301 Part A Study.

Please refer to the "Facial Paralysis" excel spreadsheet for the relevant data. Within this spreadsheet is the list of participants with an AE of Bell's Palsy or facial paralysis, as well as all other AEs for each of these subjects, as some indicate other underlying risk factors that could be associated with Bell's palsy.

The onset of the event of Bell's Palsy or facial paralysis relative to most recent vaccination is included in column Y. Whether the event occurred following dose 1 or dose 2 is included in column U and V. Age, gender, race, and ethnicity are also included, along with medical history and concomitant medications. Other risk factors are summarized in column B. Additional columns supporting this analysis are included for completeness.

ITEM 2:
2. We note an imbalance in cases of herpes zoster in the mRNA-1273 arm versus the placebo arm. For each of the cases of herpes zoster in the mRNA-1273 and placebo groups, please provide the following information, for Part A overall and for those within 28 days after any vaccination:
a. Onset relative to the most recent vaccination, including whether it followed dose 1 or dose 2
b. Please also include details of any underlying risk factors in these participants

Sponsor Response:

The Sponsor has provided an excel file with one tab for the placebo recipients (n = 23) and one tab for the mRNA-1273 recipients (n = 50) which includes all events of preferred term "Herpes zoster" that occurred during the overall period in the mRNA-1273 P301 Part A Study. The onset of the event of herpes zoster relative to most recent vaccination is included in column U for placebo recipients and column R for mRNA-1273 recipients. Whether the event of herpes zoster occurred following dose 1 or dose 2 is included in column X for placebo recipients and column U for mRNA-1273 recipients. Age, gender, race, and ethnicity are included within each table. Any underlying risk factors are included in column AP for placebo recipients and column AE for mRNA-1273 recipients. A column highlighting which event of herpes zoster occurred within 28 days of any injection is in column AO for placebo recipients and in column AN for mRNA-1273 recipients. Additional columns supporting this analysis are included for completeness.

ITEM 3:
3. For the mRNA-1273 group and the placebo group, please provide the number of participants who experienced a hypersensitivity-related event as a TEAE within 7 days of any vaccination.

Sponsor Response:

The SMQ of Hypersensitivity was used to identify hypersensitivity-related events as a TEAEs within 7 days of any vaccination. There were a total of 75 unique participants, 42 in the mRNA-1273 arm and 33 in the placebo arm. Four participants (3 placebo, 1 mRNA) had reported clear non-vaccine related hypersensitivity reaction. Three reported poison ivy (2 placebo, 1 mRNA) and 1 reported allergy to adhesive (1 placebo). Of the remaining 71 total participants, 41 received mRNA and 30 received placebo.

The excel spreadsheet "Hypersensitivity within 7 days" is provided to support this response. Note that the events deemed to clearly be non-vaccine related hypersensitivity events are highlighted in red. Also note that some participants had more than one hypersensitivity event, therefore there are more than 75 rows in the spreadsheet.