Our Reference: BLA STN 125701/0

MEETING SUMMARY
Date: November 22, 2019

Sanofi Pasteur, Inc.
Attention: Michael F. Stirr
Discovery Drive
Swiftwater, PA 18370-0187

Dear Mr. Stirr:

Attached is a copy of the memorandum summarizing your October 24, 2019, Mid-Cycle Communication teleconference with CBER. This memorandum constitutes the official record of the teleconference. If your understanding of the teleconference outcomes differs from those expressed in this summary, it is your responsibility to communicate with CBER as soon as possible.

Please include a reference to STN 125701/0 in your future submissions related to the subject product.

If you have any questions, please contact the Regulatory Project Managers, Michael Smith, PhD, Nikunj Sharma, PhD, and Ramachandra Naik, PhD, at 301-796-2640.

Sincerely,

Michael Smith, PhD
Regulatory Project Manager
Division of Vaccines and Related Products Applications
Office of Vaccines Research and Review
Center for Biologics Evaluation and Research

Mid-Cycle Communication (MCC) Teleconference Summary

Application type and number:	BLA STN 125701/0
Product name:	Meningococcal (Groups A, C, Y, and W) Polysaccharide Tetanus Toxoid Conjugate Vaccine (MENQUADFI)
Proposed Indication:	Active primary and booster immunization for the prevention of invasive meningococcal disease caused by *Neisseria meningitidis* serogroups A, C, Y, and W in individuals 2 years of age and older
Applicant:	Sanofi Pasteur, Inc.
Meeting date & time:	October 24, 2019, 2:00 – 3:30 PM
Committee Chair:	Joseph Temenak PhD
RPMs:	Mike Smith, PhD, Nikunj Sharma, PhD, and Ramachandra Naik, PhD

FDA Attendees:

Marcos Battistel, PhD	OVRR/DBPAP
Dennis Cato	OCBQ/DIS
Yin Kiu (Charles) Cheung, PhD	OBE/DB
Marion Gruber, PhD	OVRR
Lucia Lee, MD	OVRR/DVRPA
Loris McVittie, PhD	OVRR/DVRPA
Kathryn Matthias, PhD	OVRR/DBPAP
Ramachandra Naik, PhD	OVRR/DVRPA
Malcolm Nasirah, PharmD, MS	OCBQ/DIS
Scott Norris, BS	OVRR/DBPAP
Eric Peng, PhD	OVRR/DBPAP
Douglas Pratt, MD	OVRR/DVRPA
Roshan Ramanathan, MD, MPH	OVRR/DVRPA
Nikunj Sharma, PhD	OVRR/DVRPA
Jay Slater, MD	OVRR/DBPAP
Michael Smith, PhD	OVRR/DVRPA
Ching-Long (Joe) Sun, PhD	OVRR/DVRPA
Daphne Stewart	OVRR/DVRPA
Elizabeth Sutkowski, PhD	OVRR/DVRPA
Elizabeth Teeple, PhD	OBE/DB
Joseph Temenak, PhD	OVRR/DVRPA
Willie Vann, PhD	OVRR/DBPAP
Freyja Williams	OVRR/DBPAP

Applicant Attendees:

Kristen Mayer, PhD	US Reg. Lead – MenACYW Conjugate Vaccine
Yenny Ramos, MS MV	Global Reg. Lead – MenACYW Conjugate Vaccine
Thomas Rosahac	Reg. CMC Lead – MenACYW Conjugate Vaccine
Kelly Matulevich	Anal. Representative – MenACYW Conjugate Vaccine
Mandeep Singh Dhingra, MD	Clinical Program Team Lead – Menquadfi

David Neveu, PharmD	Global Pharmacovigilance Lead – Menquadfi
Steven Hauser, PhD	Site Head, Manufacturing Technology
Judy Pan, PhD	Biostatistics Lead – Menquadfi

Agenda and Discussion Summary: The agenda was sent to Sanofi Pasteur on October 22, 2019, and it is listed below, followed by the summary of the discussion for each item in italics.

1. Any significant issues/major deficiencies, categorized by discipline, identified by the Review Committee to date.

   Product:
   - Inclusion of the (b) (4) test in the stability protocol for Drug Product bulk and unit dose vial batches.
     - The discussion during the teleconference on October 17, 2019, concluded with CBER communicating that the expiry dating period for the Drug Product will depend upon the (b) (4) data, as well as the other stability data, submitted by the Applicant.

   Discussion Summary: *Sanofi stated that they agreed with CBER's requests made in the October 15, 2019 IR and during the October 17, 2019 teleconference, and work to address those concerns is in progress. Sanofi will submit the requested information soon.*

2. Information regarding major safety concerns.
   There are no major safety concerns identified at this time.

   Discussion Summary: *There was no additional discussion on this item.*

3. Preliminary Review Committee thinking regarding risk management.
   The review of the Risk Management Plan is ongoing.

   Discussion Summary: *There was no additional discussion on this item.*

4. Any information requests (IRs) sent, and responses not received.

   a. IR dated August 30, 2019 regarding (b) (4) testing

      Discussion Summary: *Sanofi stated that they are targeting to submit the (b) (4) data for MenA Drug Substance (DS) by November 01, 2019.*

   b. IR dated October 15, 2019 regarding (b) (4) testing

      Discussion Summary: *Please see discussion under item 1.*

c. IR dated October 8, 2019 requesting clarification of DS and Drug Product testing and manufacturing information

Discussion Summary: *Sanofi stated that they are targeting to submit this information on Monday, November 4, 2019.*

5. Any new IRs to be communicated.

a. IR regarding analytical methods and validations

b. IR regarding qualifications and cleaning validations of major product-contact equipment used for manufacture of the tetanus toxoid conjugate concentrates

c. IR regarding subgroup analyses in the booster study MET56

d. IR regarding the historical control ranges related to the slightly lower implantation sites, delivered pups/litter, and litter size observed in the developmental and reproductive toxicity study in rabbits and the toxicological significance of these findings.

Discussion Summary: *There was no additional discussion on this item.*

6. Proposed date for the Late-Cycle Meeting (LCM).

a. The LCM between Sanofi and the Review Committee is currently scheduled for Tuesday, January 7, 2020, 1:00 PM.

Discussion Summary: *CBER asked Sanofi if they prefer face-to-face meeting or teleconference for this PDUFA meeting. Sanofi confirmed that they prefer teleconference.*

b. We intend to send the LCM materials to Sanofi by Friday, December 27, 2019.

Discussion Summary: *There was no additional discussion on this item.*

7. This BLA will not be brought to the Vaccines and Related Biological Products Advisory Committee**.**

Discussion Summary: *There was no additional discussion on this item.*

8. Other projected milestone dates for the remainder of the review cycle, including changes to previously communicated dates.

a. Initial labeling comments due date: March 26, 2020

Discussion Summary: *There was no additional discussion on this item.*

b. Any postmarketing requirement/commitment request(s) due date: March 26, 2020

Discussion Summary: *Sanofi asked if CBER has any update regarding any potential PMCs/PMRs. CBER responded that we don't have any updates for now.*

c. First Action Due Date: April 25, 2020

Discussion Summary: *There was no additional discussion on this item.*

Additional Discussion:

1. Sanofi asked if CBER has any updates regarding GMP inspections or if CBER has waived the inspections of manufacturing facilities. CBER responded that we haven't made that determination yet, and we will inform Sanofi when the determination is made. Sanofi acknowledged.

   Post-Applicant meeting note: We have confirmed that CBER will waive the inspections for both of the Swiftwater, PA and (b) (4) manufacturing sites/facilities.