

Food and Drug Administration  
Center for Biologics Evaluation and Research

SUMMARY MINUTES  
147<sup>th</sup> VACCINES AND RELATED BIOLOGICAL PRODUCTS ADVISORY  
COMMITTEE

**July 28, 2017**

**Committee Members**

Kathryn Edwards, M.D., Chair  
Hana El Sahly, M.D.+  
Janet Englund, M.D.  
David Greenberg, M.D.\* +  
Holly Janes, Ph.D. +  
Karen Kotloff, M.D.  
Ofer Levy, M.D., Ph.D.  
Sarah Long, M.D. +  
Ruth Lynfield, M.D.  
Pamela McInnes, D.D.S., M.Sc.  
Arnold Monto, M.D.  
Patrick Moore, M.D.,  
M.P.H.+  
Mark Sawyer, M.D.  
Melinda Wharton, M.D., M.P.H.

**Temporary Voting Members**

Jack Bennink, Ph.D.  
Marie Griffin, M.D., M.P.H.  
Jay Hoofnagle, M.D.  
Mei-Ling Ting Lee, Ph.D.  
Milton Packer, M.D.  
John Ward, M.D.

**Temporary Voting Consumer  
Representative\*\***

Jay Portnoy, M.D.

**Temporary Non-Voting  
Industry Representative\*+**

Hendrik Nolte, M.D., Ph.D.

**Speakers**

**FDA**

Darcie Everett, M.D., Ph.D.  
Marian Major, M.D., FDA  
Alexandra Worobec, M.D., FDA  
John Scott, Ph.D.

**FDA Participants**

Marion Gruber, Ph.D.  
Wellington Sun, M.D.

**Dynavax**

Robert Janssen, M.D.  
William Schaffner, M.D.  
Stanley Plotkin, M.D.  
Darren K. McGuire, M.D., M.H.Sc.  
Gregory Poland, M.D., M.A.C.P, F.I.D.S.A.

**Designated Federal Officer**

Serina Hunter-Thomas, M.S.A., R.N.

**Committee Management Specialist**

Rosanna Harvey

+ Not in attendance

\* Industry Representative

\*\* Temporary Consumer Representative

These summary minutes for the July 28, 2017 Meeting of the Vaccines and Related Biological Products Advisory Committee were approved on October 23, 2017.

I certify that I participated on the July 28, 2017 Meeting of the Vaccines and Related Biological Products Advisory Committee and that these minutes accurately reflect what transpired.

/S/  
Serina Hunter-Thomas, M.S.A., R.N.  
Designated Federal Officer

/S/  
Kathryn Edwards, M.D.  
Chair

On July 28, 2017 at 8:30 a.m. Eastern Standard Time (EST), the Chair, Dr. Kathryn Edwards, called to order the 147th Meeting of the Vaccines and Related Biological Products Advisory Committee (VRBPAC) to discuss and make recommendations on the safety and efficacy of a Hepatitis B Vaccine (Heplisav) manufactured by Dynavax. The meeting was held in an open session. The Chair invited the members, temporary members, and the participants seated at the table to introduce themselves including Dr. Jay Portnoy, the temporary Consumer Representative for this meeting, who participated via teleconference. The Designated Federal Officer (DFO) made administrative remarks and read the Conflict of Interest statement into the public record. There were no waivers issued for conflicts of interest for this meeting. After the Conflict of Interest statement was read for the public record by the DFO, the FDA and non-FDA speaker presentations began.

An introduction and overview of the topic along with the three discussion topics were presented by Dr. Marian Major from the Office of Vaccines Research and Review (OVRR), Center for Biologics Evaluation and Research (CBER) of the Food and Drug Administration (FDA). The FDA overview was followed by sponsor presentations by Dynavax. The morning break was bypassed due to time constraints. After the Dynavax presentations, Dr. Alexandra Worobec from OVRR, CBER made a presentation entitled, "Immunogenicity." This was followed by a presentation "Safety" by Dr. Darcie Everett from OVRR, CBER. After this presentation, Dr. John Scott from the Office of Biostatistics and Epidemiology (OBE), CBER made a presentation entitled, "Statistical Analysis of Acute Myocardial Infarction Risk." Following Dr. Scott's presentation, the committee took a break for lunch.

After the lunch break, the committee reconvened for the Open Public Hearing (OPH) session. Oral comments were made by: Dr. Megan Polanin from the National Center for Health Research, Dr. David Thomas from Johns Hopkins University School of Medicine, Mr. Ryan Clary from National Viral Hepatitis Roundtable, Dr. Robert Perrillo from Baylor University Medical Center, Dr. Judith Weisman, Ms. Joan Block from Hepatitis B

Foundation, Dr. W. Ray Kim from Stanford University School of Medicine, Dr. Kathleen Schwarz from John Hopkins University School of Medicine, Dr. Vivian Huang from Adult Immunization and Emergency Preparedness, Ms. Jane Pan from Hepatitis B Initiative of Washington, D.C., Mr. Nick Walsh from Pan American Health Organization, Dr. James Woody, Ms. Bunmi Daramaja, Ms. Maureen Kamischke, Mr. Michael Weir from the National Alliance of State and Territory AIDS Directors, and Dr. Sherri Young from the West Virginia Bureau for Public Health. Representatives from public health organizations and academia who spoke during the Open Public Hearing noted that the vaccine could provide rapid protection for at-risk groups and provide protection in individuals who either do not respond to the current 3 dose vaccine schedule or choose not to receive the current vaccine due to the 6-month immunization schedule.

Following the OPH, the committee proceeded with the discussion and subsequent voting portion of the meeting. Committee discussion began with a review of the following questions previously presented during the first presentation:

1. Do the available data support the safety of Heplisav-B when administered to adults 18 years and older? Please vote “Yes” or “No”  
If “Yes”
2. Please comment on the proposed pharmacovigilance plan.  
If “No”
3. Do the presented data support usage in a more specific subpopulation? Please vote “Yes” or “No”
4. What additional studies (pre- and post- licensure) are needed to further evaluate the safety of Heplisav-B in the general adult population and/or in specific subpopulations?

The Committee expressed favorable support for Heplisav, particularly given the vaccine administration schedule of two doses given one month apart. A discussion followed on the deficiencies and limitations of the Pharmacovigilance Plan (PVP) proposed by Dynavax, including the need to assess cardiac events in an expeditious manner, to address selection bias in the recruitment of subjects and to formulate an event driven data analysis plan.

The Committee (9 regular members plus 7 temporary voting members, total 16) voted (15 electronically, and 1 by phone/email) on Question number 1 only:

1. **Do the available data support the safety of Heplisav-B when administered to adults 18 years and older?**

The committee voting results are: 12 Yes, 3 Abstention, 1 No.

Note: After the committee voted on the first question, a verbal count and reading of member names was done for the public record which was captured by the transcript. That verbal count did not include Dr. Portnoy's "Yes" vote that he provided over the phone, as well as via email. The transcript states the total count of "Yes" votes as 11, which is the number that was read aloud but that is not the correct total. The final total count of "Yes" votes for Question number # 1 was 12, which includes Dr. Portnoy's vote. The committee did not vote on Discussion Question number # 3.

The meeting was adjourned at 3:32 p.m. on July 28, 2017.

Additional information and details may be obtained from the transcript and the recording of the webcast of the meeting that may be viewed at:

Part 1: <https://collaboration.fda.gov/p6ib4yjrndg/>

Part 2: <https://collaboration.fda.gov/p8nl0rzdggw/>