



FOOD AND DRUG ADMINISTRATION
CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

MEMORANDUM

Original BLA REVIEW

DATE: September 24, 2015

FROM: Alla Kachko, Ph.D.
Product Reviewer, DVP

SUBJECT: BLA 125563/0 – CMC information for the hepatitis B component
Product Name: (b) (4), Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine Adsorbed (DTaP), Inactivated Poliovirus (IPV), Haemophilus b Conjugate (Hib) and Recombinant Hepatitis B Vaccine (HepB)

Sponsor: MCM Vaccine Company

TO: Marian Major, Ph.D. DVP
Sara Gagneten, Ph.D. DVP
Robin Levis, Ph.D. DVP

Proposed indication: Active immunization against diphtheria, tetanus, pertussis, poliomyelitis, hepatitis B, and invasive disease due to Haemophilus influenzae type b (Hib) as a three dose series at 2, 4 and 6 months in children from 6 weeks through 4 years of age.

(b) (4) (referred to as PR5I in this memo) is the joint development of Sanofi Pasteur and Merck (MCM Vaccine Company).

This review covers the Drug Substance and Drug Product information for the hepatitis B surface antigen (HBsAg) component of (b) (4). The Drug Substance and Drug Product manufacturing process and process controls is cross-referenced to the currently approved license for Merck's BLA for Hepatitis B Vaccine (Recombinant) (Recombivax HB) (BLA 101066) as well as to the newly submitted BLA 125581/0 from Merck for further manufacturing use (FFMU) of the hepatitis B bulk.

The second part covers the review of the Drug Product specification and test validation.

Drug Substance

(b) (4)

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]	[Redacted]
[Redacted]	[Redacted]

5 Pages Determined to be Not-Releasable: (b)(4)

Drug Product

This part covers the following Drug Product information for the HBsAg component of PR5I:

- 1) Drug product release and stability specifications
- 2) Description of analytical tests
- 3) Validation of analytical tests by Sanofi Pasteur (for assays transferred from Merck to Sanofi Pasteur)
- 4) Reference standard and materials

Specifications:

The sponsor set up the following release and shelf-life specifications for the HBsAg component of the PR5I vaccine **Final Bulk Product**:

Table 2: Release and Shelf-Life Specification for HBsAg component of PR5I Final Bulk product (The source is Table 1 Section 3.2.P.5.1)

(b) (4)

(b) (4)

(b) (4)

21 Pages Determined to be Not-Releasable: (b)(4)

(b) (4)

Based on the submitted data I recommend approval of this application.