

# Data Fitness Findings Report

**BLA125761**

Emergent BioSolutions, Inc, May 2022

| Findings   |                     |   | Notes |
|--|---------------------|---|-------|
| <p><b><i>EBS.AVA.210</i></b><br/> <b>Title:</b> <i>A Phase 2 Drug-Vaccine Interaction Study to Examine Whether Coadministering AV7909 with Ciprofloxacin or Doxycycline Affects Antibiotic Pharmacokinetics or AV7909 Immunogenicity in Healthy Adults</i></p> |                     |   |       |
| <b>Document / Standard</b>   | <b>Version</b>      | <b>Notes</b>  |       |
| annotated CRF  |                     | Seems fine  |       |
| SDTM Implementation Guide  | SDTM-IG v3.2        |   |       |
| SDTM Controlled Terminology  | 2020-05-08          |   |       |
| SDTM define.xml  | V2.0                | Derivations reference raw data not received. For example, for RFENDTC: Set to latest date and time from EX1.EX1STDAT_RAW and EX1STTIM, EX2.EX2STDAT_RAW and EX2STTIM, EX3.EX3STDAT_RAW and EX3STTIM, EX4.EX4STDAT_RAW and EX4STTIM, EX5.EX5STDAT_RAW and EX5STTIM, EOMED1. EOMEDTMSTP_RAW and EOMED3, EOMED2. EOMED2TMSTP_RAW and EOMED2_3, ORALLATE. ORALLATEQ1 and ORALLATEQ2. For ACTARMCD = 'NOTTRT' set to the latest DS.DSSTDAT_RAW date. Set to null for screen failures or unassigned subjects. |       |
| Medications Dictionary   | WHOGLOBAL_202003_B3 |   |       |
| Medical Events Dictionary (MedDRA)   | V22.0               |   |       |
| SDTM Reviewer's Guide  | PhUSE template      | File named 'sdrg.pdf' instead of 'csdrg.pdf'  |       |

**EBS.AVA.212**

**Title:** *A Phase 3, Randomized, Double-blind, Parallel-group Trial to Evaluate the Lot Consistency, Immunogenicity, and Safety of AV909 for Postexposure Prophylaxis of Anthrax in Healthy Adults.*

| Document / Standard                | Version             | Notes  |
|------------------------------------|---------------------|--|
| annotated CRF                      |                     | Seems fine   |
| SDTM Implementation Guide          | SDTM-IG v3.2        |  |
| SDTM Controlled Terminology        | 2019-06-28          |  |
| SDTM define.xml                    | V2.0                | Derivations reference raw data not received. For example, for RFSTDTC: Set to date part of CDM.RND.RANDOMIZED_AT_RAW and concatenated with the converted time portion of RANDOMIZED_AT_RAW to local 24 hour time using the file EBS.AVA.212_Time Zones by Site_29Sep2020.xlsx merged onto to RND by SITE. If timezone=Eastern then convert time - 18000, else if timezone=Central then convert time-21600, else if timezone=Mountain then convert time -25200, else if timezone=Pacific then convert time - 28800 and format time in HH:MM:SS. |
| ADaM define.xml                    | V2.0                | There are two ADaM define.xml files: define-1.xml and define-2.xml. Neither open correctly because they provided two stylesheet files, but both are named incorrectly. You need to change the file name from 'define2-0-0-1.xsl' or 'define2-0-0-2.xsl' to 'define2-0-0.xsl' to get them to display properly.  |
| Medications Dictionary             | WHOGLOBAL_202003_B3 |  |
| Medical Events Dictionary (MedDRA) | V22.0               |  |
| SDTM Reviewer's Guide              | PhUSE template      | Seems fine   |

**ISS****Title: AV7909 BLA - 2021**

| <b>Document / Standard</b>         | <b>Version</b>         | <b>Notes</b> |
|------------------------------------|------------------------|--------------|
| annotated CRF                      |                        | N/A          |
| SDTM Implementation Guide          | SDTM-IG v3.2           |              |
| ADaM Implementation Guide          | ADaM-IG v1.1           |              |
| SDTM Controlled Terminology        | 2020-06-26             |              |
| SDTM define.xml                    | V2.0                   |              |
| ADaM define.xml                    | V2.0                   |              |
| Medications Dictionary             | WHODD<br>GLOBALB3Mar21 |              |
| Medical Events Dictionary (MedDRA) | V24.1                  |              |
| Reviewer's Guides                  | PhUSE template         |              |

From ADRG: All AV7909 treatment groups with all regimen and formulation in the four AV7909 clinical studies (EBS.AVA.201, EBS.AVA.208, EBS.AVA.210, and EBS.AVA.212) will be pooled and presented in the ISS.

|   |  |
|---|--|
| <p><i>Data Issues</i></p>   |  |
| <p><b>Two sets of ADaM datasets provided for study EBS.AVA.212</b></p> <ul style="list-style-type: none"> <li>• All provided in the same folder, differentiated with '-1' or '-2' appended to the filename <ul style="list-style-type: none"> <li>○ For example, there is an ADAE-1.xpt dataset and an ADAE-2.xpt dataset. There are two versions of every ADaM dataset</li> <li>○ The ADDD-1.xpt dataset is exactly the same as ADDD-2.xpt</li> <li>○ For the other datasets, it seems that the datasets are the same, except the values differ for the following variables: <ul style="list-style-type: none"> <li>▪ SAFFL</li> <li>▪ ITTFL</li> <li>▪ PPROTFL</li> <li>▪ COMP12FL</li> <li>▪ RANDFL</li> <li>▪ SCRNFL</li> <li>▪ IMMUFL</li> <li>▪ COMPLTFL</li> <li>▪ COMPLSFL</li> <li>▪ CONMEDFL</li> </ul> </li> <li>○ <b>Note that they do not list an actual derivation in the define.xml for these variables.</b> For example: <ul style="list-style-type: none"> <li>▪ The algorithm listed in the define.xml for SAFFL is: "Safety Population Flag"</li> <li>▪ The algorithm listed in the define.xml for ITTFL is: "Intent-To-Treat Population Flag"</li> <li>▪ Etc.</li> </ul> </li> <li>○ Therefore, it is not possible to tell (as far as I can see) what the different derivations between the two versions of the datasets are.</li> <li>○ From the adrg-2.pdf file: This document corresponds to a second set of ADaM files that were created to exclude subjects from Site 1027 from any potential analysis population. Due to concerns associated with Site 1027, a decision was made in Nov2021 to create a second version of ADaM files that would retain all data for Site 1027 but exclude those records from any outputs produced from the associated set of ADaM files. This convention allowed all source data from SDTM to be included in ADaM files for transparency. <b>All populations variables for Site 1027, including the screened population flag, were set to 'N' in ADSL and all subsequent ADAM datasets were run using the modified ADSL file. Records for subjects not associated with Site 1027 were confirmed as unchanged from the original ADaM.</b></li> </ul> </li> </ul> | <p><i>Potentially Critical Issue</i></p> |
| <p><b>Inconsistent coding of the exact same AETERM across/within studies</b></p> <ul style="list-style-type: none"> <li>• Affects two terms across the two studies</li> </ul>   |  |

| aeterm                 | aellt                   | aedecod                 | aeht  | aehtgt  | aebodsys   | STUDYID     | count_of_aes | medd_rav |
|------------------------|-------------------------|-------------------------|---|---|--|-------------|--------------|----------|
| ELEVATED BLOOD GLUCOSE | BLOOD GLUCOSE INCREASED | BLOOD GLUCOSE INCREASED | CARBOHYDRATE TOLERANCE ANALYSES (INCL DIABETES) | METABOLIC, NUTRITIONAL AND BLOOD GAS INVESTIGATIONS   | INVESTIGATIONS                                       | EBS.AVA.212 | 2            | 22.0     |
| ELEVATED BLOOD GLUCOSE | HYPERGLYCEMIA           | HYPERGLYCAEMIA          | HYPERGLYCAEMIC CONDITIONS NEC                   | GLUCOSE METABOLISM DISORDERS (INCL DIABETES MELLITUS) | METABOLISM AND NUTRITION DISORDERS                   | EBS.AVA.210 | 1            | 22.0     |
| FEVER                  | POST PROCEDURAL FEVER   | POST PROCEDURAL FEVER   | NON-SITE SPECIFIC PROCEDURAL COMPLICATIONS      | PROCEDURAL RELATED INJURIES AND COMPLICATIONS NEC     | INJURY, POISONING AND PROCEDURAL COMPLICATIONS       | EBS.AVA.210 | 2            | 22.0     |
| FEVER                  | FEVER                   | PYREXIA                 | FEBRILE DISORDERS                               | BODY TEMPERATURE CONDITIONS                           | GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS | EBS.AVA.212 | 5            | 22.0     |

### Inconsistent coding of the exact same AETERM in ISS

- Affects three terms across the two studies

| aeterm                 | aellt                   | aedecod                 | aeht  | aebodsys   | STUDYID     | count_of_aes | medd_rav |
|------------------------|-------------------------|-------------------------|---|--|-------------|--------------|----------|
| ELEVATED BLOOD GLUCOSE | BLOOD GLUCOSE INCREASED | BLOOD GLUCOSE INCREASED | CARBOHYDRATE TOLERANCE ANALYSES (INCL DIABETES) | INVESTIGATIONS                                       | EBS.AVA.212 | 2            | 24.1     |
| ELEVATED BLOOD GLUCOSE | HYPERGLYCEMIA           | HYPERGLYCAEMIA          | HYPERGLYCAEMIC CONDITIONS NEC                   | METABOLISM AND NUTRITION DISORDERS                   | EBS.AVA.210 | 1            | 24.1     |
| FEVER                  | FEVER                   | PYREXIA                 | FEBRILE DISORDERS                               | GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS | AVA.208     | 2            | 24.1     |
| FEVER                  | FEVER                   | PYREXIA                 | FEBRILE DISORDERS                               | GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS | EBS.AVA.201 | 12           | 24.1     |
| FEVER                  | FEVER                   | PYREXIA                 | FEBRILE DISORDERS                               | GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS | EBS.AVA.212 | 5            | 24.1     |

|  |   |   |  |   |             |   |      |  |
|--|---|---|--|---|-------------|---|------|--|
| FEVER  | POST PROCEDURAL FEVER                   | POST PROCEDURAL FEVER                   | NON-SITE SPECIFIC PROCEDURAL COMPLICATIONS | INJURY, POISONING AND PROCEDURAL COMPLICATIONS  | EBS.AVA.210 | 2 | 24.1 |  |
| GENERALIZED MUSCLE ACHES   | GENERALIZED MUSCLE ACHES                | MYALGIA                                 | MUSCLE PAINS                               | MUSCULOSKELETAL AND CONNECTIVE TISSUE DISORDERS | EBS.AVA.201 | 1 | 24.1 |  |
| GENERALIZED MUSCLE ACHES   | MUSCULOSKELETAL PROCEDURAL COMPLICATION | MUSCULOSKELETAL PROCEDURAL COMPLICATION | MUSCULOSKELETAL PROCEDURAL COMPLICATIONS   | INJURY, POISONING AND PROCEDURAL COMPLICATIONS  | EBS.AVA.210 | 1 | 24.1 |  |
| <b>CEENDTC not provided for reactogenicity data</b>  |   |   |  |   |             |   |      |  |
| <ul style="list-style-type: none"> <li>• Affects both studies</li> <li>• Unable to determine if events should be considered adverse events or not</li> </ul> |   |   |  |   |             |   |      |  |
|  |   |   |  |   |             |   |      |  |
|  |   |   |  |   |             |   |      |  |