

### 3.2.A.2. ADVENTITIOUS AGENTS SAFETY EVALUATION [KALAMAZOO]

Multiple mechanisms, procedures, and assays are used to minimize the entry of adventitious agents into the process stream and detect those agents that do enter the process stream. The adventitious agent control program includes the (b) (4)

#### 3.2.A.2.1. Introduction

The main theoretical risk associated with these ingredients is a contamination of the product by Transmissible Spongiform Encephalopathy (TSE) agents. A multifaceted program has been established to ensure the viral safety of the drug product, including (b) (4)

Management of transmissible spongiform encephalopathy (TSE) / bovine spongiform encephalopathy (BSE) risks is part of the comprehensive adventitious agent control program for COVID-19 Vaccine.

All raw materials used in the production of BNT162b2 are evaluated as part of a comprehensive program to identify and manage TSE/BSE risks. Under this program, the risk of transmission of TSE/BSE through the use of animal-derived materials is managed by sourcing such materials in a manner consistent with the current industry guidelines including those from the European Medicines Agency (EMA), the Therapeutic Goods Administration (TGA), and the World Health Organization (WHO).

The conclusion from the TSE/BSE risk evaluations performed for raw materials is that the risk of transmitting TSE/BSE via BNT162b2 has been minimized.

Details of any material, reagent, or component containing material of animal origin including its source and preparation are discussed in the following sections. (b) (4)

Moreover, equipment and materials are (b) (4) according to validated procedures.

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### **3.2.A.2.2. Non-Viral Adventitious Agents**

#### **3.2.A.2.2.1. Raw Material Sourcing and Testing**

Raw material vendors are qualified to sourcing materials from them for use in the manufacturing process. Raw material information is provided in [3.2.S.2.3 Control of Materials used in Manufacturing](#).

In particular, the human or animal-derived materials are provided in [Table 3.2.A.2-1](#). All other materials are of synthetic and/or biological origin.

**Table 3.2.A.2-1. Materials of Animal Origin Used in the Manufacture of BNT162b2 DP**

(b) (4)



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### **3.2.A.2.3. Conclusion**

In summary, a comprehensive, multifaceted program is in place to ensure that the risk, with respect to potential viral and non-viral adventitious agents contamination of drug product, is acceptable. Equipment is cleaned by validated cleaning procedures described in 3.2.A.1 Facility and Equipment – Puurs. In addition, sterility testing is performed on the final product, as described in 3.2.P.5.1 Specifications.