DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

DISTRICT OFFICE ADDRESS AND PHONE NUMBER	DATE(S) OF INSPECTION
U.S. FDA CBER Office of Compliance and Biologics Quality 10903 New Hampshire Ave W071-5128 Silver Spring, MD 20993-0002 TEL: 240-402-9159 Industry Information: www.fda.gov/oc/industry	06/06/2022 - 06/14/2022
	FEI NUMBER 3004066112

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT IS ISSUED

TO: Mr. Mark Proctor, Senior Director, Site Operations

FIRM NAME	STREET ADDRESS
MedImmune UK Limited (Astra Zeneca/Supply Biologics)	6 Renaissance Way, Boulevard Industry Park
CITY, STATE AND ZIP CODE	TYPE OF ESTABLISHMENT INSPECTED
Liverpool, United Kingdom, L24 9JW	Vaccine Manufacturer

THIS DOCUMENT LISTS OBSERVATIONS MADE BY THE FDA REPRESENTATIVE(S) DURING THE INSPECTION OF YOUR FACILITY. THEY ARE INSPECTIONAL OBSERVATIONS; AND DO NOT REPRESENT A FINAL AGENCY DETERMINATION REGARDING YOUR COMPLIANCE. IF YOU HAVE AN OBJECTION REGARDING AN OBSERVATION, OR HAVE IMPLEMENTED, OR PLAN TO IMPLEMENT CORRECTIVE ACTION IN RESPONSE TO AN OBSERVATION, YOU MAY DISCUSS THE OBJECTION OR ACTION WITH THE FDA REPRESENTATIVE(S) DURING THE INSPECTION OR SUBMIT THIS INFORMATION TO FDA AT THE ADDRESS ABOVE. IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT FDA AT THE PHONE NUMBER AND ADDRESS ABOVE.

DURING AN INSPECTION OF YOUR FIRM (I) (WE) OBSERVED:

1. Critical reagents are not always qualified prior to release for use in the manufacturing of U.S. licensed product. SOP-0069233, entitled "General Procedure for Processing and Qualifying Critical Reagents", v13.0 is not always followed. Specifically, [redacted] are critical reagents designed by the [redacted]). However, critical [redacted] are not qualified prior to use in the [redacted] to determine if the [redacted] the genotypic and phenotypic properties of the [redacted].

2. The bacterial endotoxin procedure is deficient to ensure adequate detection of endotoxin in the samples.

A. Analytical method used to detect bacterial endotoxin in [redacted], LAIV Monovalent Bulk (MVB), and LAIV Finished Product are inadequate. Specifically,

SOP-0067568, entitled "The Endotoxin Testing of Product by [redacted]", v40.0 is deficient in that the mixing requirement for the [redacted] sample [redacted] and subsequent [redacted] preparations are not described. Without qualified mixing, your firm lacks assurance that endotoxin can be adequately recovered and detected when present in the samples.

B. [redacted] are being used to store [redacted] and MVB samples. Endotoxin can adhere to [redacted] to give false negative test results. Your firm conducted a study in 2016 to show [redacted] suitability in recovering endotoxin spike at 5 EU/mL. However, this study was deficient, it did not, for example, demonstrate spike recovery at a lower endotoxin level of [redacted], which is the action limit for MVB.

3. Your firm did not notify the license holder of a deviation that may potentially affect the quality of a distributed drug product. Specifically,

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE	EMPLOYEE(S) NAME AND TITLE (*Print or Type*)	DATE ISSUED
		Burnell M. Henry, CSO Eileen A. Liu, CSO	06/14/2022

DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

DISTRICT OFFICE ADDRESS AND PHONE NUMBER	DATE(S) OF INSPECTION
U.S. FDA CBER Office of Compliance and Biologics Quality 10903 New Hampshire Ave W071-5128 Silver Spring, MD 20993-0002 TEL: 240-402-9159 Industry Information: www.fda.gov/oc/industry	06/06/2022 - 06/14/2022
	FEI NUMBER 3004066112

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT IS ISSUED

TO: Mr. Mark Proctor, Senior Director, Site Operations

FIRM NAME	STREET ADDRESS
MedImmune UK Limited (Astra Zeneca/Supply Biologics)	6 Renaissance Way, Boulevard Industry Park
CITY, STATE AND ZIP CODE Liverpool, United Kingdom, L24 9JW	TYPE OF ESTABLISHMENT INSPECTED Vaccine Manufacturer

The (b)(4) is used in the QC in-process and release of Live Attenuated Influenza Vaccine (LAIV) drug substance or drug product tests. On 1/17/2019, during the - of the (b)(4) for the (b)(4), the following failure modes were identified:

• Audit trail did not record the opening of a file for data review. This resulted in no electronic records of reviewer reviewing original data.
• Audit trail did not record a - being read if file was not saved by the analyst.

The investigation concluded that there no risk to patients and that there were no product quality concerns. However, the firm did not notify the license holder for them to assess the potentially impacted distributed licensed products in the event of the license holder opting to submit a Biological Product Deviation Report.

4. There is a lack of validation to support (b)(4) assigned expiry. Specifically, a (b)(4) is currently applied to (b)(4) used within the manufacturing and QC areas. In 2017, your firm used data provide by the vendor to support the (b)(4). You did not conduct your own validation to support the assigned expiry. For example, you did not demonstrate -, while being used by your personnel following your manufacturing procedure within your facilities, can remain sterile at the (b)(4) expiry.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) NAME AND TITLE (*Print or Type*)	DATE ISSUED
	Burnell M. Henry, CSO Eileen A. Liu, CSO	06/14/2022

The observations of objectionable conditions and practices listed on the front of this form are reported:

1. Pursuant to Section 704(b) of the Federal Food, Drug and Cosmetic Act, or

2. To assist firms inspected in complying with the Acts and regulations enforced by the Food and Drug Administration.

Section 704(b) of the Federal Food, Drug, and Cosmetic Act (21 USC 374(b)) provides:

"Upon completion of any such inspection of a factory, warehouse, consulting laboratory, or other establishment, and prior to leaving the premises, the officer or employee making the inspection shall give to the owner, operator, or agent in charge a report in writing setting forth any conditions or practices observed by him which, in his judgement, indicate that any food, drug, device, or cosmetic in such establishment (1) consists in whole or in part of any filthy, putrid, or decomposed substance, or (2) has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health. A copy of such report shall be sent promptly to the Secretary."