



DBSQC/OCBQ ANALYTICAL METHOD REVIEW MEMO

To: The file STN 125789/0

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Sponsor: Adaptimmune LLC.

Subject: Review of Analytical Methods used for afamitresgene autoleucel (b) (4)
[REDACTED] drug product (DP) Lot Release

Recommendation: Approval

Abbreviations:

MAGE-A4 (Melanoma-Associated Antigen A4)-c1032 Lentiviral Vector (LV) – at (b) (4)
[REDACTED]

MAGE-A4-c1032 LV – (b) (4)
[REDACTED]

ADP-A2M4 MAGE-A4-c1032 LV – DP: Suspension for Intravenous, at Adaptimmune
Navy Yard (NY) facility in Philadelphia, PA

Executive Summary:

The suitability of the following analytical methods used for lot release of MAGE-A4 (Melanoma-Associated Antigen A4)-c1032 Lentiviral Vector (LV), (b) (4)
[REDACTED] used for production of afamitresgene autoleucel (ADP- A2M4) (TECELRA), and the TECELRA DP, were reviewed and found to be adequate for their intended use.

1. (b) (4)
[REDACTED]

3. Appearance of (b) (4) [REDACTED] DP

Documents reviewed

Information in sections of the original submission that describe control of DS and DP (3.2.S.4 and 3.2.P.5, respectively), including cover letter, introduction, descriptions of DS and DP specifications, analytical procedures of DS and DP and validation of these analytical procedures were reviewed.

Background

On December 05, 2023, Adaptimmune LLC submitted a new Biologics License Application (BLA), STN125789 for afamitresgene autoleucel (TECELRA), an autologous

cell therapy indicated for the treatment of adult patients with unresectable or metastatic synovial sarcoma who have received prior systemic therapy, and whose tumor expresses the MAGE-A4 antigen as detected by an FDA-approved test.

TECELRA is a genetically modified autologous T-cell immunotherapy product consisting of CD4 and CD8 positive T-cells transduced with a self-inactivating lentiviral vector (LV), expressing an enhanced-affinity T-cell receptor (TCR) specific for human cancer/testis melanoma-associated antigen 4 (MAGE-A4). The TCR engages a human leukocyte antigen A*02 (HLA-A*02) restricted MAGE-A4 peptide which results in T-cell proliferation, cytokine secretion, and killing of MAGE-A4/HLA-A*02 expressing cancer cells.

TECELRA is produced using the patient's T cells that have undergone ex vivo CD4 and CD8 T cell enrichment using (b) (4)


The cells are subsequently transduced using the MAGE-A4-c1032 LV, followed by expansion. (b) (4)

and washed. The autologous T cell product is formulated in a (b) (4) suitable for infusion and is supplied cryopreserved at a temperature of $\leq -130^{\circ}\text{C}$. Each cryostorage bag contains $2.68 - 10 \times 10^9$ MAGE-A4 specific TCR positive T cells in frozen suspension containing 5% DMSO.

Review Narrative

(b) (4)


(b) (4)



3. Appearance - (b) (4) TECELRA DP

Introduction



(b) (4)



The lot release test for appearance of DP is performed at the Adaptimmune Navy Yard (NY) facility in Philadelphia, PA. The DP release specifications are 1) DP bag is (b) (4) 2) absence of visible foreign particulates in DP bag is 3) for color, it is (b) (4) 4) for clarity, it is (b) (4) .


Method:

(b) (4)





Method Validation

(b) (4)



(b) (4)



Conclusion:

The information provided to support validation of the appearance test performed at the NY facility, Philadelphia, PA is adequate and demonstrates the tests are suitable for lot release testing of (b) (4) DP.