Utilization Review Policy 333

POLICY: Oncology (Injectable) – Amtagvi Utilization Management Medical Policy

- Amtagvi™ (lifileucel intravenous infusion – Iovance Biotherapeutics)

EFFECTIVE DATE: 5/15/2024
LAST REVISION DATE: 02/19/2025

COVERAGE CRITERIA FOR: All UCare Plans

OVERVIEW

Amtagvi, a tumor-derived autologous T cell immunotherapy, is indicated for the treatment of unresectable or metastatic melanoma in adults who have been previously treated with a programmed death receptor-1 (PD-1) blocking antibody, and if *BRAF V600* mutation positive, a BRAF inhibitor with or without a MEK inhibitor.[1]

Dosing Information

Amtagvi is provided as a single dose for intravenous infusion containing a suspension of tumor-derived T cells in 5% dimethyl sulfoxide.[1] The dose contains between 7.5×10^9 to 72×10^9 viable cells and is supplied in one or more frozen infusion bags. The bags are stored in the vapor phase of liquid nitrogen (less than or equal to minus 150°C). Amtagvi is for autologous use only.

Prior to receiving Amtagvi, patients are pretreated with lymphodepleting chemotherapy consisting of cyclophosphamide 60 mg/kg intravenously with mesna for 2 days followed by fludarabine 25 mg/m^2 intravenously daily for 5 days. Amtagvi is administered as soon as possible, 24 hours after the last dose of fludarabine but no later than 4 days after the last dose of fludarabine.

Guidelines

The National Comprehensive Cancer Network (NCCN) melanoma: cutaneous (version 2.2025 – January 28, 2025) treatment guidelines recommend Amtagvi as a "Preferred" high-dose therapy as second-line or subsequent treatment for metastatic or unresectable disease following progression on anti-PD-1 therapy and BRAF/MEK inhibitor therapy if *BRAF V600* mutation positive (category 2A).[2,3]

Safety

Amtagvi has a Boxed Warning for treatment-related mortality, prolonged severe cytopenia, severe infection, and cardiopulmonary and renal impairment.[1]

POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of Amtagvi. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indication. Because of the specialized skills required for evaluation and diagnosis of patients treated with Amtagvi as well as the monitoring required for adverse events and long-term efficacy, approval requires Amtagvi

to be prescribed by or in consultation with a physician who specializes in the condition being treated. The approval duration is 6 months to allow an adequate time frame to prepare and administer 1 dose of therapy.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Amtagvi is recommended in those who meet the following criteria:

FDA-Approved Indication

1. **Melanoma.** Approve a single dose if the patient meets ALL of the following (A, B, C, D, E, F, and G):
   - **A)** Patient is ≥ 18 years of age; AND
   - **B)** Patient has unresectable or metastatic disease; AND
   - **C)** Patient has been treated with a programmed death receptor-1 (PD-1) blocking antibody or a programmed death-ligand 1 (PD-L1) blocking antibody; AND
     Note: Examples of PD-1/PD-L1 blocking antibodies includes Keytruda (pembrolizumab intravenous infusion), Opdivo (nivolumab intravenous infusion), and Tecentriq (atezolizumab intravenous infusion).
   - **D)** If the patient is BRAF V600 mutation positive, the patient has been treated with a BRAF inhibitor with or without a MEK inhibitor; AND
     Note: Examples of BRAF inhibitors includes Braftovi (encorafenib capsules), Zelboraf (vemurafenib tablets), and Tafinlar (dabrafenib capsules).
   - **E)** Patient has received or is planning to receive lymphodepleting chemotherapy prior to infusion of Amtagvi; AND
   - **F)** Patient has NOT been previously treated with Amtagvi; AND
   - **G)** The medication is prescribed by or in consultation with an oncologist.

   Dosing. The dose of Amtagvi is between 7.5×10^9 and 72×10^9 viable cells administered intravenously as a single dose.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Amtagvi is not recommended in the following situations:

1. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Amtagvi™ intravenous infusion [prescribing information]. Philadelphia, PA: Iovance Biotherapeutics; February 2024.
2. The NCCN Drugs & Biologics Compendium. © 2025 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on February 10, 2025. Search term: lifileucel.
3. The NCCN Melanoma: Cutaneous Clinical Practice Guidelines in Oncology (version 2.2025 – January 28, 2025). © 2025 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on February 10, 2025.

HISTORY

Type of Revision	Summary of Changes	Review Date
New Policy	--	02/21/2024
Update	04/03/2024: The guideline section was updated with recommendations from the National Comprehensive Cancer Network.	N/A
UCare P&T Review	Policy reviewed and approved by UCare P&T committee. Annual review process	09/16/2024
Annual Revision	No criteria changes.	02/19/2025