

**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 Aspirus Medicare Plans

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### **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.<sup>1</sup>

### **Dosing Information**

Amtagvi is provided as a single dose for intravenous infusion containing a suspension of tumor-derived T cells in 5% dimethyl sulfoxide.<sup>1</sup> The dose contains between  $7.5 \times 10^9$  to  $72 \times 10^9$  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<sup>2</sup> 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).<sup>2,3</sup>

### **Safety**

Amtagvi has a Boxed Warning for treatment-related mortality, prolonged severe cytopenia, severe infection, and cardiopulmonary and renal impairment.<sup>1</sup>

**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**

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**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  $\geq 18$  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  $7.5 \times 10^9$  and  $72 \times 10^9$  viable cells administered intravenously as a single dose.

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**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
Aspirus P&T Review	Policy reviewed and approved by Aspirus P&T committee. Annual review process	09/16/2024
Annual Revision	No criteria changes.	02/19/2025