

Clinical Policy: Lifileucel (Amtagvi)

Reference Number: LA.PHAR.598

Effective Date: 10.27.24

Last Review Date: ~~06.28.24~~04.18.25

Line of Business: Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

****Please note: This policy is for medical benefit****

Description

Lifileucel (Amtagvi®) is an autologous tumor infiltrating lymphocyte (TIL) cell therapy.

FDA Approved Indication(s)

Amtagvi is indicated for the treatment of adult patients with unresectable or metastatic melanoma previously treated with a programmed death receptor-1 (PD-1) blocking antibody, and if BRAF V600 mutation positive, a BRAF inhibitor with or without MEK inhibitor*.

**This indication is approved under accelerated approval based on objective response rate (ORR). Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).*

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

All requests reviewed under this policy **require medical director review**.

It is the policy of Louisiana Healthcare Connections that Amtagvi is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Melanoma (must meet all):

1. Diagnosis of unresectable or metastatic melanoma;
2. Prescribed by or in consultation with an oncologist;
3. Age \geq 18 years;
4. Documentation of disease progression, inadequate response, or intolerance while on the following regimens (a and b) ~~(c)~~; *see Appendix B*):
 - a. Anti-PD-1 or PD-L1 therapy;
 - b. If BRAF V600 mutation positive: BRAF inhibitor therapy with or without a MEK inhibitor;
5. Amtagvi is prescribed in combination with IL-2* therapy (e.g., aldesleukin);
**Prior authorization may be required for IL-2 therapy*
6. Documentation that member has at least one resectable lesion (or aggregate of lesions resected) of a minimum 1.5 cm in diameter (*see Appendix D*);

7. Documentation that the member's melanoma is not of known uveal/ocular origin (*see Appendix D*);
8. Member has not received an organ allograft or treatment with prior TIL therapy or prior chimeric antigen receptor T-cell (CAR-T) therapy (e.g., Breyanzi®, Kymriah®, Tecartus®, Yescarta®, Carvykti®) (*see Appendix D*);
9. Request meets both of the following (a and b):
 - a. Dose contains a minimum of 7.5×10^9 viable T cells;
 - b. Dose does not exceed a single administration of 72×10^9 viable T cells.

Approval duration: 3 months (1 dose only, with up to 6 doses of IL-2 therapy [aldesleukin])

B. Other diagnoses/indications (must meet 1 or 2):

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
 - a. For drugs on the PDL, the no coverage criteria policy for the relevant line of business: LA.PMN.255; or
 - b. For drugs NOT on the PDL, the non-formulary policy for the relevant line of business: LA.PMN.16; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53 for Medicaid.

II. Continued Therapy

A. Melanoma

1. Continued therapy will not be authorized as Amtagvi is indicated to be dosed one time only.

Approval duration: Not applicable

B. Other diagnoses/indications (must meet 1 or 2):

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
 - a. For drugs on the PDL, the no coverage criteria policy for the relevant line of business: LA.PMN.255; or
 - b. For drugs NOT on the PDL, the non-formulary policy for the relevant line of business: LA.PMN.16; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – LA.PMN.53 or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

| | |
|--|---|
| BRAF: B-Raf proto-oncogene, serine/threonine kinase | MEK: mitogen-activated extracellular signal-regulated kinase |
| CAR: chimeric antigen receptor | PD-1: programmed death receptor-1 |
| FDA: Food and Drug Administration | PD-L1: programmed death-ligand 1 |
| IL-2: interleukin-2 | TIL: tumor infiltrating lymphocytes |

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may require prior authorization.

| Drug Name | Dosing Regimen | Dose Limit/ Maximum Dose |
|--|-----------------------|-------------------------------------|
| PD-1/PDL-1 targeted combination therapy (Opdivo [®] with Yervoy [®] , Opdualag [®]) | Varies | Varies |
| PD-1/PDL-1 targeted monotherapy (Opdivo, Keytruda [®]) | Varies | Varies |
| PD-1/PDL-1 and BRAF-MEK combination targeted therapy (Tecentriq [®] /Cotellic [®] / Zelboraf [®]) | Varies | Varies |
| BRAF-MEK combination targeted therapy (Cotellic [®] / Zelboraf [®] , Tafinlar [®] / Mekinist [®] , Mektovi [®] /Braftovi [®]) | Varies | Varies |

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): none reported
- Boxed warning(s): treatment-related mortality, prolonged severe cytopenia, severe infection, cardiopulmonary and renal impairment

Appendix D: General Information

- Amtagvi requires the administration of IL-2 (e.g., aldesleukin) to stimulate TIL cells after infusion.
- One resectable lesion (or aggregate of lesions resected) of a minimum 1.5 cm in diameter is required because TIL therapy involves resectioning a tumor and amplifying the T-cells within the resectioned tumor. If a smaller tumor/aggregate tumor size was used, then there may not be adequate volume of T-cells after amplification, resulting in a less efficacious product.
- The safety and efficacy of Amtagvi is unknown in patients with melanoma of uveal/ocular origin and patients with previous organ allograft or prior cell transfer therapy.

V. Dosage and Administration

| Indication | Dosing Regimen | Maximum Dose |
|------------|---|---------------------------------|
| Melanoma | Single dose IV infusion of 7.5×10^9 to 72×10^9 viable T cells | 72×10^9 viable T cells |

VI. Product Availability

Infusion bag(s): frozen suspension of tumor-derived T-cells labeled for specific recipient

VII. References

1. Amtagvi Prescribing Information. Philadelphia, PA, NJ: Iovance Biotherapeutics Manufacturing LLC; February 2023. Available at: <https://www.fda.gov/media/176417/download?attachment.amtagvi.com>. Accessed February 21, 2023. August 7, 2024.
2. National Comprehensive Cancer Network. Melanoma: Cutaneous Version 2.2024. Available at: https://www.nccn.org/professionals/physician_gls/pdf/cutaneous_melanoma.pdf. Accessed August 7, 2024.
3. Sarnaik AA, Hamid O, Khushalani NI, et al. Lifileucel, a tumor-infiltrating lymphocytes therapy, in metastatic melanoma. *J Clin Oncol* 2021 39:2656-2666. DOI: 10.1200/JCO.21.00612.
4. Chesney J, Lewis KD, Kluger H, et al. Efficacy and safety of lifileucel, a one-time autologous tumor-infiltrating lymphocyte (TIL) cell therapy, in patients with advanced melanoma after progression on immune checkpoint inhibitors and targeted therapies: pooled analysis of consecutive cohorts of the C-144-01 study. *J Immunother Cancer*. 2022 Dec;10(12):e005755. doi: 10.1136/jitc-2022-005755.
3. National Comprehensive Cancer Network. Melanoma: Cutaneous v1.2024. Available at: https://www.nccn.org/professionals/physician_gls/pdf/cutaneous_melanoma.pdf. Accessed March 13, 2024.
4. ClinicalTrials.gov. Study of Lifileucel (LN-144), Autologous tumor infiltrating lymphocytes, in the treatment of patients with metastatic melanoma (LN-144). Available at: <https://clinicaltrials.gov/ct2/show/NCT02360579>. Accessed March 13, 2024.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

| HCPCS Codes | Description |
|-------------|--|
| C9399 | Unclassified drugs or biologicals |
| J9999 | Not otherwise classified, antineoplastic drugs |

| Reviews, Revisions, and Approvals | Date | LDH Approval Date |
|--------------------------------------|----------|-------------------|
| Converted corporate to local policy. | 06.28.24 | 9.26.24 |

| Reviews, Revisions, and Approvals | Date | LDH Approval Date |
|--|----------------|-------------------|
| <u>Added blurb that this policy for medical benefit only; no significant changes; references reviewed and updated.</u> | <u>4.18.25</u> | |

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC-level administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

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