Aldesleukin (Proleukin®)

NDC CODE(S) 76310-0022-XX PROLEUKIN 22000000UNIT Solution Reconstituted (CLINIGEN GROUP PLC)

DESCRIPTION

Aldesleukin is a human recombinant interleukin-2 product classified as a biological response modifier. It is a highly purified protein manufactured by recombinant DNA technology to encode a modified human IL-2 gene. The resulting agent possesses the same biological activities of native IL-2, including the inhibition of tumor growth; however side effects can be life threatening, including capillary leak syndrome (CLS). CLS is characterized by a loss of vascular tone and extravasation of plasma proteins and fluid into the extravascular space. It results in hypotension and reduced organ perfusion which may be severe and can result in death

POLICY

- Aldesleukin for the treatment of the following is considered ***medically necessary*** if the medical appropriateness criteria are met: **(See Medical Appropriateness below.)**
  - Hematopoietic Cell Transplantation/ GVHD
  - Melanoma
  - Renal cell carcinoma (kidney cancer)
- Aldesleukin for the treatment of other conditions/diseases is considered ***investigational.***

MEDICAL APPROPRIATENESS

INITIAL APPROVAL

- Patient is at least 18 years of age; **AND**
- Patient must have normal cardiac function (i.e., normal ejection fraction and unimpaired wall motion) as determined by thallium stress testing prior to initiating therapy; **AND**
- Patient must have normal pulmonary function determined by formal pulmonary function testing (i.e., FEV1 >2 liters or ≥75% of predicted for height and age) prior to initiating therapy; **AND**
- Patient must have a baseline serum creatinine of ≤1.5 mg/dL prior to initiating therapy; **AND**
- Pre-existing bacterial infections should be adequately treated prior to initiation of therapy; **AND**

Universal Criteria
- Patient has an ECOG performance status of 0-1; **AND**
- Proleukin will be administered in a hospital setting under close supervision of a qualified physician; **AND**
- Patient must not have an organ allograft; **AND**
- Patient must not have untreated or active CNS metastases; **AND**

Renal Cell Carcinoma
- Patient has relapsed or metastatic disease; **AND**
- Used as a single agent; **AND**
- Used as first-line therapy; **AND**
- Patient has predominant clear cell histology

Melanoma
- Patient has unresectable or metastatic disease; **AND**
- Used as a single agent: **AND**

- Used as first line therapy; **OR**
- Used as subsequent therapy; **AND**
  - Patient has disease progression or used after maximum clinical benefit from BRAF targeted therapy; **AND**
  - Patient does not have inadequate organ reserves

Hematopoietic Cell Transplantation

- Used for chronic graft-versus-host disease (GVHD) as additional therapy in conjunction with systemic corticosteroids following no response (steroid-refractory disease) to first-line therapy options

RENEWAL CRITERIA

- Patient continues to meet universal and other indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in initial approval criteria; **AND**
- Disease response with treatment as defined by stabilization of disease or decrease in size of tumor or tumor spread; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: capillary leak syndrome (CLS), sustained ventricular tachycardia (≥5 beats), cardiac arrhythmias not controlled or unresponsive to management; chest pain with ECG changes, consistent with angina or myocardial infarction; cardiac tamponade, intubation for >72 hours, renal failure requiring dialysis >72 hours, coma or toxic psychosis lasting >48 hours, repetitive or difficult to control seizures; bowel ischemia/perforation, GI bleeding requiring surgery, serious manifestations of eosinophilia, etc..; **AND**
- Patient must not have developed moderate to severe lethargy or somnolence

DOSAGE/ADMINISTRATION

INDICATION	DOSE
Melanoma & Renal Cell Carcinoma	600,000 IU/kg (0.037 mg/kg) administered intravenously ~~IV~~ every 8 hours for a maximum of 14 doses. Following 9 days of rest, the schedule is repeated for another 14 doses, for a maximum of 28 doses per course, as tolerated. Each treatment course should be separated by a rest period of at least 7 weeks from the date of hospital discharge.
Hematopoietic Cell Transplantation/ GVHD	1 million IU/m^2 subcutaneously daily for 12 weeks, followed by a 4 week treatment break after the initial treatment period. Thereafter, patients showing improvement can continue treatment at the same dose (1 million IU/m^2 subcutaneously daily) indefinitely.

LENGTH OF AUTHORIZATION

- Coverage for RCC and melanoma is provided for 2 months and may be renewed.
- Coverage for HSCT is provided for 4 months and may be renewed.

DOSING LIMITS

Max Units (per dose and over time) [HCPC Unit]:

HSCT

- Initially 84 billable units per 112 days, maintenance is 1 billable unit per day

All other indications

- 88 billable units per 68 days

APPLICABLE TENNESSEE STATE MANDATE REQUIREMENTS

BlueCross BlueShield of Tennessee's Medical Policy complies with Tennessee Code Annotated Section 56-7-2352 regarding coverage of off-label indications of Food and Drug Administration (FDA) approved drugs when the off-label use is recognized in one of the statutorily recognized standard reference compendia or in the published peer-reviewed medical literature.

IMPORTANT REMINDER

We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a Member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the Medical Policy and a health plan, the express terms of the health plan will govern.

ADDITIONAL INFORMATION

For appropriate chemotherapy regimens, dosage information, contraindications, precautions, warnings, and monitoring information, please refer to one of the standard reference compendia (e.g., the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) published by the National Comprehensive Cancer Network®, Drugdex Evaluations of Micromedex Solutions at Truven Health, or The American Hospital Formulary Service Drug Information).

SOURCES

1. Proleukin [package insert]. Yardley, PA; Clinigen, Inc.; September 2019. Accessed November 2020.
2. Referenced with permission from the NCCN Drugs and Biologics Compendium (NCCN Compendium®) aldesleukin; Interleukin-2, recombinant. National Comprehensive Cancer Network, 2020. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed November 2020.
3. Fyfe G, Fisher RI, Rosenberg SA, et al. Results of treatment of 255 patients with metastatic renal cell carcinoma who received high-dose recombinant interleukin-2 therapy. J Clin Oncol. 1995 Mar; 13(3):688-96.
4. Atkins MB, Lotze MT, Dutcher JP, et al. High-dose recombinant interleukin 2 therapy for patients with metastatic melanoma: analysis of 270 patients treated between 1985 and 1993. J Clin Oncol. 1999 Jul; 17(7):2105-16.
5. Koreth J, Kim HT, Jones KT, et al. Efficacy, durability, and response predictors of low dose interleukin-2 therapy for chronic graft-versus-host disease. Blood. 2016 Jul 7;128(1):130-7. doi: 10.1182/blood-2016-02-702852. Epub 2016 Apr 12.
6. Lexicomp Online. (2020, March). AHFS DI. Aldesleukin. Retrieved December 29, 2020 from Lexicomp Online with AHFS.
7. MICROMEDEX Healthcare Series. Drugdex Evaluations. (2020, November). Aldesleukin. Retrieved December 29, 2020 from MICROMEDEX Healthcare Series.

EFFECTIVE DATE 6/2/2021

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