 Approved Revision: Do Not Implement Until 4/2/21

Pegaspargase

NDC CODE(S) 00944-3810-XX ONCASPAR 750UNIT/ML Solution (SHIRE US INC)
72694-0954-XX ONCASPAR 750UNIT/ML Solution (SERVIER PHARMACEUTICALS)

DESCRIPTION

Pegaspargase is a conjugate of monomethoxypolyethylene glycol (mPEG) and L-asparaginase (L-asparagine amidohydrolase), a polymerized asparagine specific enzyme. This produces an agent with reduced immunogenicity and a prolonged plasma half-life compared to native L-asparaginase. Additionally, dosing is less frequent, there is a lower incidence of toxicity, less tendency for resistance development and better efficacy and safety for those refractory to or intolerant of native L-asparaginase.

L-asparaginase is produced endogenously by *E. coli.* It catalyzes the conversion of the amino acid L-asparagine into aspartic acid and ammonia. The leukemic effect of pegaspargase is thought to be due to depletion of plasma L-asparagine. Leukemic cells with low expression of asparagine synthetase have a reduced ability to synthesize L-asparagine and therefore depend on an exogenous source of L-asparagine for survival.

POLICY

- Pegaspargase for the treatment of the following is considered ***medically necessary*** if the medical appropriateness criteria are met. **(See Medical Appropriateness below.)**
  - Acute Lymphoblastic Leukemia (ALL)
  - T-Cell Lymphoma

- Pegaspargase for the treatment of other conditions/diseases is considered ***investigational.***

MEDICAL APPROPRIATENESS

INITIAL APPROVAL

- Pegaspargase is considered **medically appropriate** if **ALL** of the following criteria are met:
  - Individual is 1 month ~~year~~ of age or older
  - Any prior L-asparaginase* therapy has no history of pancreatitis, thrombosis or hemorrhagic events
  - Individual does not have severe hepatic impairment (e.g., Child-Pugh class C)
  - Treatment is used as a component of multi-agent chemotherapy
  - Diagnosis of **ANY ONE** of the following:
    - Acute Lymphoblastic Leukemia used as **ANY ONE** of the following:
      - First line therapy
      - Hypersensitivity to native forms of L-asparaginase*
      - Systemic CNS-directed therapy
      - Relapsed/refractory disease that is **ANY ONE** of the following:
        - Ph chromosome-negative
        - Ph chromosome-positive and **ANY ONE** of the following:
          - Refractory to tyrosine kinase inhibitor (TKI) therapy
          - Used in conjunction with a TKI (if not used previously)
    - T-Cell Lymphoma that is **ANY ONE** of the following:
      - Extranodal NK/T-Cell Lymphoma nasal-type disease
      - Aggressive NK-cell leukemia (ANKL)
      - Hepatosplenic T-Cell Lymphoma as additional therapy if no response or progressive disease after first-line therapy

**Note: Commercial Elspar® (asparaginase) was discontinued in 2012 for business reasons*

RENEWAL CRITERIA

- Pegaspargase is considered **medically appropriate** for renewal if **ALL** of the following criteria are met:
  - Individual continues to meet initial approval criteria
  - Absence of unacceptable toxicity from the drug, e.g., allergic reactions (including anaphylaxis), thrombosis (including sagittal sinus thrombosis, cerebral thrombosis, ischemia, stroke), coagulopathy, ~~severe hepatotoxicity,~~ severe hyperglycemia, pancreatitis, bleeding (including intracranial hemorrhage), etc.
  - Diagnosis of **ANY ONE** of the following:
    - Acute lymphoblastic leukemia (ALL) with disease stabilization or improvement as evidenced by a complete response (CR) (e.g., morphologic, cytogenetic or molecular complete response, complete hematologic response or a partial response by CBC, bone marrow cytogenic analysis, QPCR, or FISH)
    - T-Cell Lymphoma with disease response as defined by stabilization of disease or decrease in size of tumor or tumor spread

INDICATION(S)	DOSAGE & ADMINISTRATION
All indications	**Individuals ≤ 21 years old:** 2,500 International Units/m^2 intramuscularly or intravenously administered no more frequently than every 14 days. **Individuals > 21 years old:** 2,000 International Units/m^2 intramuscularly or intravenously administered no more frequently than every 14 days

LENGTH OF AUTHORIZATION

Coverage will be provided for six months and may be renewed

Refer to **DOSAGE LIMITS** below

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

Lexicomp Online. (2020). AHFS DI. *Pegaspargase.* Retrieved November 16, 2020 from Lexicomp Online with AHFS.

MICROMEDEX Healthcare Series. Drugdex Evaluations. (2019, November). *Pegaspargase*. Retrieved November 16, 2020 from MICROMEDEX Healthcare Series.

National Comprehensive Cancer Network. (2020). NCCN Drugs & Biologics Compendium®. *Pegaspargase.* Retrieved November 16, 2020 from the National Comprehensive Cancer Network.

U. S. Food and Drug Administration. (2020, June). Center for Drug Evaluation and Research. *Oncaspar® (pegaspargase) injection, for intramuscular or intravenous use.* Retrieved November 16, 2020 from https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/103411s5198lbl.pdf.

EFFECTIVE DATE 4/2/21

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