Clinical Policy: Erwinia Asparaginase (Erwinaze)

Reference Number: CP.PHAR.301
Effective Date: 02/17
Last Review Date: 02/17

Coding Implications
Revision Log

See Important Reminder **at the end of this policy for important regulatory and legal information.**

Description
The intent of the criteria is to ensure that patients follow selection elements established by Centene® clinical policy for asparaginase *Erwinia chrysanthemi* (Erwinaze®).

Policy/Criteria
It is the policy of health plans affiliated with Centene Corporation® that Erwinaze is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Acute Lymphoblastic Leukemia (must meet all):

1. Diagnosis of acute lymphoblastic leukemia (ALL);
2. Meets a or b:
   a. FDA approved use (i and ii):
      i. Prescribed with a multi-agent chemotherapeutic regimen consisting of ≥ 2 agents (e.g., Erwanaze + a chemotherapeutic regimen consisting of vincristine, an anthracycline [daunorubicin, doxorubicin] and a corticosteroid);
      ii. Member has developed hypersensitivity to E. coli-derived asparaginase.
   b. Off-label NCCN recommended use:
      i. Prescribed as a substitution for pegaspargase if member has experienced a pegaspargase-associated allergic reaction (pegaspargase is an E coli.-derived pegylated form of asparaginase available as Oncaspar);
3. Member has none of the following contraindications to therapy:
   a. History of a serious (Grade 3* [severe] or Grade 4* [life-threatening]) hypersensitivity reaction to Erwinaze (e.g., anaphylaxis and/or other allergic reaction involving bronchospasm, hypotension, edema or requiring parenteral intervention);
   b. History of serious pancreatitis, thrombosis or hemorrhage with prior asparaginase therapy (i.e., therapy with *E. coli*- or *Erwinia* –derived asparaginase, or pegaspargase).

**Grading is based on the Common Terminology Criteria for Adverse Events (CTCAE).*

Approval duration: 3 months

B. Other diagnoses/indications: Refer to CP.PHAR.57 – Global Biopharm Policy.

II. Continued Approval

A. Acute Lymphoblastic Leukemia (must meet all)**:**

1. Currently receiving medication via Centene benefit or member has previously met all initial approval criteria;
2. Member has none of the following reasons to discontinue:
   a. No disease progression or unacceptable toxicity;
   b. Serious (Grade 3* [severe] or Grade 4* [life-threatening]) hypersensitivity reaction to Erwinaze (e.g., anaphylaxis and/or other allergic reaction involving bronchospasm, hypotension, edema or requiring parenteral intervention);
   c. Severe or hemorrhagic pancreatitis manifested by abdominal pain lasting > 72 hours and accompanied by an amylase elevation ≥ 2 times the upper limit of normal;
   d. Unresolved thrombotic or hemorrhagic event.

**Grading is based on the Common Terminology Criteria for Adverse Events (CTCAE).*

Approval duration: 6 months

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy; or
2. Refer to CP.PHAR.57 - Global Biopharm Policy**.**

Background

Description/Mechanism of Action:

Erwinaze (asparaginase Erwinia chrysanthemi) contains an asparagine specific enzyme derived from Erwinia chrysanthemi. Asparaginase *Erwinia chrysanthemi* catalyzes the deamidation of asparagine to aspartic acid and ammonia, resulting in a reduction in circulating levels of asparagine. The mechanism of action of Erwinaze is thought to be based on the inability of leukemic cells to synthesize asparagine due to lack of asparagine synthetase activity, resulting in cytotoxicity specific for leukemic cells that depend on an exogenous source of amino acid asparagine for their protein metabolism and survival.

Formulations:

Erwinaze is a lyophilized powder supplied in a clear 3 mL glass vial.

- Each carton of Erwinaze contains 5 vials.
- Each single vial contains 10,000 International Units asparaginase Erwinia chrysanthemi.

FDA Approved Indications:

Erwinaze (asparaginase *Erwinia chrysanthemi*) is an asparagine specific enzyme/intramuscular or intravenous formulation indicated as:

- A component of a multi-agent chemotherapeutic regimen for the treatment of patients with acute lymphocytic leukemia (ALL) who have developed hypersensitivity to *E. coli*-derived asparaginase.

Appendices

Appendix A: Abbreviation Key

ALL: Acute lymphocytic leukemia
CTCAE: Common terminology criteria for adverse events

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
J9019	Injection, asparaginase, (Erwinaze), 1,000 IU

Reviews, Revisions, and Approvals	Date	Approval Date
New policy created.	02/17	02/17

References
1. Erwinaze prescribing information. Palo Alto, CA: Jazz Pharmaceuticals, Inc.; March 2016. Available at http://www.erwinaze.com/ERWINAZEPI.pdf. Accessed January 26, 2017.
2. Asparaginase *Erwinia chrysanthemi*. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at NCCN.org. Accessed January 26, 2017.
3. Acute lymphoblastic leukemia (Version 2.2016). In: National Comprehensive Cancer Network Guidelines. Available at www.NCCN.org. Accessed January 26, 2017.

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. The Health Plan 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.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at http://www.cms.gov for additional information.