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.

<table>
<thead>
<tr>
<th>HCPCS Codes</th>
<th>Description</th>
<th>Date</th>
<th>Approval Date</th>
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<tr>
<td>J9019</td>
<td>Injection, asparaginase, (Erwinaze), 1,000 IU</td>
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Reviews, Revisions, and Approvals
New policy created. 02/17 02/17

References

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. The Health Plan 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. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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 Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. 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. 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
dvice 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.

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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

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