Clinical Policy: Vandetanib (Caprelsa)

Reference Number: CP.PHAR.80
Effective Date: 10/11
Last Review Date: 03/17

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 vandetanib (Caprelsa®).

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

I. Initial Approval Criteria

A. Thyroid Cancer (meets 1 or 2):

1. FDA approved use (i and ii):
   a. Diagnosis of medullary thyroid cancer
   b. Unresectable locally advanced or metastatic disease that is progressive or symptomatic;
2. NCCN recommended use (i-iv):
   a. Diagnosis of one of the following thyroid cancer subtypes:
      i. Follicular carcinoma;
      ii. Hurthle cell carcinoma;
      iii. Papillary carcinoma;
   b. Unresectable, locally advanced or metastatic disease that is progressive or symptomatic;
   c. Disease is iodine-refractory;
   d. Clinical trials or other systemic therapies are not available or appropriate.

Approval duration: 6 months

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

1. The following NCCN recommended uses meeting NCCN categories 1, 2a, or 2b, are approved per the CP.PHAR.57 Global Biopharm Policy:
   a. Non-small cell lung cancer.

II. Continued Approval

A. Thyroid Cancer (must meet all)**:**

1. Currently receiving medication via Centene benefit or member has previously met all initial approval criteria;
2. No disease progression.

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:

Vandetanib is a kinase inhibitor. *In vitro*, vandetanib inhibits the activity of tyrosine kinases including members of the epidermal growth factor receptor family (EGFR), vascular endothelial cell growth factor receptors (VEGF), rearranged during transfection (RET), protein tyrosine kinase 6 (BRK), TIE2, members of the EPH receptors kinase family, and members of the Src family of tyrosine kinases. Vandetanib inhibits endothelial cell migration, proliferation, survival, and new blood vessel formation in *in* vitro models of angiogenesis. Vandetanib also inhibits EGFR-dependent cell survival *in vitro*. Vandetanib inhibits epidermal growth factor-stimulated receptor tyrosine kinase phosphorylation in tumor cells and endothelial cells and VEGF-stimulated tyrosine kinase phosphorylation in endothelial cells. *In vivo*, vandetanib reduced tumor cell-induced angiogenesis, tumor vessel permeability, and inhibited tumor growth and metastasis in mouse models of cancer.

Formulations:

Caprelsa oral tablets: 100 mg, 300 mg

FDA Approved Indications:

Caprelsa is a kinase inhibitor/oral tablet formulation indicated for:

- Treatment of symptomatic or progressive medullary thyroid cancer in patients with unresectable locally advanced or metastatic disease.

Use Caprelsa in patients with indolent, asymptomatic or slowly progressing disease only after careful consideration of the treatment related risks of Caprelsa.

Safety Information:

Boxed Warning: QT prolongation, Torsades de Pointes, and sudden death

- Caprelsa can prolong the QT interval. Torsades de pointes and sudden death have occurred in patients receiving Caprelsa.
- Do not use Caprelsa in patients with hypocalcemia, hypokalemia, hypomagnesemia, or long QT syndrome. Correct hypocalcemia, hypokalemia and/or hypomagnesemia prior to Caprelsa administration.
- Monitor electrolytes periodically.
- Avoid drugs known to prolong the QT interval.
- Only prescribers and pharmacies certified with the restricted distribution program are able to prescribe and dispense Caprelsa.

Appendices

Appendix A: Abbreviation Key

EGFR: Epidermal growth factor receptor family
VEGF: Vascular endothelial cell growth factor receptors
QT: QT Interval (measure between Q wave and T wave in the heart's electrical cycle)

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
N/A	

Reviews, Revisions, and Approvals	Date	Approval Date
Converted embedded SGM document into Centene policy	09/13	
Removed prospective ECG monitoring question from algorithm Added additional drug names to Appendix B	03/14	03/14
Updated occurrence stats Updated Safety section Updated References	02/15	03/15
Policy converted to new template. Criteria: added max dose, expanded contraindications/safety concerns per PI; removed upper age limit, drug, QT and ECG monitoring requirement, and disease progression or unacceptable toxicity general statement. Background: limited to description/MOA and FDA indications. Appendices: removed Appendix A: QT Monitoring and Electrocardiogram (ECG) Recommendations for Caprelsa, and Appendix B: Examples of Drugs Known to Prolong the QT Interval. Added boxed warning safety information.	01/16	03/16
Age restriction removed. The following cautions/contraindications are covered by the Caprelsa REMS program and so are not listed separately: Congential long QT syndrome, Torsades de pointes, bradyarrhythmias, uncompensated heart failure, electrolyte monitoring, drug interactions, dosing.Safety criteria were removed unless they meet all the following: represent contraindications or black box warnings not covered by a REMS program, that can be objectively measured and diagnosed/ruled out with a single test.	02/17	03/17

References
1. Caprelsa prescribing information. Wilmington, DE: AstraZeneca Pharmaceuticals LP; July 2016. Available at http://www.caprelsa.com/files/caprelsa-pi.pdf. Accessed February 22, 2017.
2. Caprelsa REMS program. Wilmington, DE: AstraZeneca Pharmaceuticals LP; December 2013. Available at http://www.caprelsarems.com/files/caprelsa-hcp-rems-educational-pamphlet.pdf. Accessed February 22, 2017.
3. Vandetanib. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at NCCN.org. Accessed February 23, 2017.

4. Thyroid (Version 1.2016). In: National Comprehensive Cancer Network Guidelines. Available at NCCN.org. Accessed February 23, 2017.
National Comprehensive Cancer Network. NCCN Guidelines V.4.2017. Non-Small Cell Lung Cancer. Accessed March 7, 2017.

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 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.

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.