Clinical Policy: Erlotinib (Tarceva)
Reference Number: CP.PHAR.74
Effective Date: 09/11
Last Review Date: 11/16

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 erlotinib (Tarceva®).

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

I. Initial Approval Criteria
   A. Non-Small Cell Lung Cancer (must meet all):
      1. Diagnosis of non-small cell lung cancer (NSCLC);
      2. Tarceva is not prescribed concurrently with platinum-based chemotherapy (e.g., cisplatin, carboplatin);
      3. Meets (a or b):
         a. FDA approved use (i and ii):
            i. Tumor is positive for an epidermal growth factor receptor (EGFR) exon 19 deletion or EGFR exon 21 (L858R) substitution mutation as detected by an FDA-approved test;
            ii. Tarceva will be used in one of the following ways for metastatic disease:
               a) As first-line therapy;
               b) As maintenance therapy after initial treatment with chemotherapy;
               c) As second- or greater-line therapy after progression following one or more chemotherapy regimens;
         b. Off-label NCCN recommended use (i and ii):
            i. Tumor is positive for a known sensitizing EGFR mutation as detected by an FDA-approved test;
            ii. Tarceva will be used in one of the following ways for recurrent or metastatic disease:
               a) As first-line therapy;
               b) As subsequent therapy following disease progression on Tarceva for one of the following:
                  1) Asymptomatic disease without rapid radiologic progression or threatened organ function;
                  2) Symptomatic brain lesions;
                  3) Isolated symptomatic systemic lesions.
      Approval duration: 3 months
   B. Pancreatic Cancer (must meet all):
C. Other diagnoses/indications: Refer to CP.PHAR.57 - Global Biopharm Policy.
   1. Off-label NCCN recommended uses for Tarceva, meeting NCCN categories 1, 2a or 2b, are approved for the following indications per the CP.PHAR.57 Global Biopharm policy:
      a. Bone cancer – chordoma;
      b. Central nervous system cancer - leptomeningeal metastases from NSCLC;
      c. Kidney cancer;
      d. Vulvar cancer.

II. Continued Approval
A. All Indications (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. Interstitial lung disease;
      b. Gastrointestinal perforation;
      c. Severe hepatotoxicity (total bilirubin > 3x upper limit of normal or alanine amino transferase [ALT]/ aspartate amino transferase [AST]) > 5x ULN) that does not improve significantly or resolve within 3 weeks;
      d. If pre-existing hepatic impairment or biliary obstruction, a doubling of bilirubin or tripling of transaminase (ALT/AST) values over baseline that does not improve significantly or resolve within 3 weeks;
      e. Severe bullous, blistering or exfoliating conditions;
      f. Corneal perforation or severe ulceration.

   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:
Erlotinib is a kinase inhibitor that reversibly inhibits the kinase activity of EGFR, preventing autophosphorylation of tyrosine residues associated with the receptor and thereby inhibiting further downstream signaling. EGFR is expressed on the cell surface of both normal and cancer cells. In some tumor cells, signaling through this receptor plays a role in tumor cell survival and proliferation irrespective of EGFR mutation status. Erlotinib binding affinity for EGFR exon 19
deletion or exon 21 (L858R) mutations is higher than its affinity for the wild type receptor. Erlotinib inhibition of other tyrosine kinase receptors has not been fully characterized.

**Formulations:**
Tablet, Oral
  Tarceva: 25 mg, 100 mg, 150 mg

**FDA Approved Indications:**
Tarceva is a tyrosine kinase inhibitor/oral tablet formulation with the following indications:

- **Non-small cell lung cancer (NSCLC)**
  - The treatment of patients with metastatic NSCLC whole tumors have epidermal growth factor receptor (EGFR) exon 19 deletions or exon 21 (L858R) substitution mutations as detected by an FDA-approved test receiving first-line, maintenance, or second or greater line treatment after progression following at least one prior chemotherapy regimen.
  - Safety and efficacy of Tarceva have not been established in patients with NSCLC whose tumors have other EGFR mutations.
  - Tarceva is not recommended for use in combination with platinum-based chemotherapy.

- **Pancreatic cancer**
  - Tarceva in combination with gemcitabine is indicated for the first-line treatment of patients with locally advanced, unresectable or metastatic pancreatic cancer.

**Appendices**

**Appendix A: Abbreviation Key**
EGFR: epidermal growth factor receptor
NSCLC: non-small cell lung cancer
ULN: upper limit of normal

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<thead>
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<th>Reviews, Revisions, and Approvals</th>
<th>Date</th>
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<tr>
<td>Standardized language on continuing therapy with a oncology medication</td>
<td>08/13</td>
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<td>First-line treatment of metastatic NSCLC with EGFR mutations was added</td>
<td>07/14</td>
<td>08/14</td>
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<td>Updated the clinical background information</td>
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<td>Added efficacy data and updated safety information</td>
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<td>Added ECOG performance status to algorithm</td>
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<td>Added appendices A – E</td>
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<td>Added Tarceva mechanism of action and bioavailability to background. Edited Appendix B: Dosing</td>
<td>6/15</td>
<td>08/15</td>
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<td>Combined Appendix E with D</td>
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<td>Added age limitation to adults per package insert. Added reference to Appendix C wherever asks about toxicity. Replaced monotherapy restriction in the NSCLC questions with the more specific platinum-based therapy restriction per the PI limitations of use section – reflected this edit</td>
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**Clinical Policy**

Erlotinib

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<td>in the policy’s indications section as well. Supplemented question about performance status (PS) for pancreatic cancer with NCCN guideline language in Appendix D. Supplemented question about PS for NSCLC with NCCN guideline language in Appendix D and added a question under PS 3-4 in the algorithm about EGFR sensitive mutations per NCCN guidelines.</td>
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<td>Policy converted to new template. NSCLC: FDA approved use criteria is made slightly less specific to incorporate NCCN compendial uses that are similar but less restrictive. Added one additional “off-label” NSCLC use under Section I.A.2.b. “NCCN recommended use”. Pancreatic cancer: FDA and NCCN indications presented as one criteria set. Additional NCCN uses: all additional NCCN recommended uses are listed under Section C – “other diagnoses/indications”.</td>
<td>06/16</td>
<td>08/16</td>
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<td>Language for NSCLC maintenance therapy changed to “maintenance therapy for metastatic disease after prior chemotherapy”. Maintenance therapy is deleted from the NSCLC NCCN recommended use. Vulvar cancer is added as an additional recommended use. Under section II. Continued Approval, the following edits are made to reasons to discontinue: 1) Added “If pre-existing hepatic impairment or biliary obstruction, a doubling of bilirubin or tripling of transaminase (ALT/AST) values over baseline that does not improve significantly or resolve within 3 weeks”; 2) removed “no disease progression or unacceptable toxicities.”</td>
<td>11/16</td>
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**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 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.

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**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](http://www.cms.gov) for additional information.