

## **Clinical Policy: Selpercatinib (Retevmo)**

Reference Number: CP.PHAR.478

Effective Date: 09.01.20

Last Review Date: 05.22

Line of Business: Commercial, HIM, Medicaid

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

### **Description**

Selpercatinib (Retevmo<sup>®</sup>) is a kinase inhibitor.

### **FDA Approved Indication(s)**

Retevmo is indicated for the treatment of:

- Adult patients with locally advanced or metastatic non-small cell lung cancer (NSCLC) with a rearranged during transfection (*RET*) gene fusion, as detected by an FDA-approved test
- Adult and pediatric patients 12 years of age and older with advanced or metastatic medullary thyroid cancer (MTC) with a *RET* mutation, as detected by an FDA-approved test, who require systemic therapy\*
- Adult and pediatric patients 12 years of age and older with advanced or metastatic thyroid cancer with *RET* gene fusion, as detected by an FDA-approved test, who require systemic therapy and who are radioactive iodine-refractory (if radioactive iodine is appropriate)\*
- Adult patients with locally advanced or metastatic solid tumors with a *RET* gene fusion that have progressed on or following prior systemic treatment or who have no satisfactory alternative treatment options\*

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*\*This indication is approved under accelerated approval based on overall response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trial(s).*

### **Policy/Criteria**

*Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.*

It is the policy of health plans affiliated with Centene Corporation<sup>®</sup> that Retevmo 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 recurrent, advanced, or metastatic NSCLC;
2. Prescribed by or in consultation with an oncologist;
3. Age  $\geq$  18 years;
4. Documentation of *RET* fusion-positive disease (e.g., KIF5B-RET);
5. Retevmo is not prescribed concurrently with Gavreto<sup>™</sup>;
6. Member has not received prior *RET* targeted therapy (e.g., Gavreto);
7. Prescribed as a single agent;

8. For brand Retevmo requests, member must use generic selpercatinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
9. Request meets one of the following (a, b, or c):\*
  - a. Weight < 50 kg: Dose does not exceed both (i and ii):
    - i. 240 mg per day;
    - ii. 4 capsules per day;
  - b. Weight ≥ 50 kg: Dose does not exceed both (i and ii):
    - i. 320 mg per day;
    - ii. 4 capsules per day;
  - c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

\*Prescribed regimen must be FDA-approved or recommended by NCCN

**Approval duration:**

**Medicaid/HIM** – 6 months

**Commercial** – 12 months or duration of request, whichever is less

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

1. Diagnosis of one of the following (a, b, or c):
  - a. MTC;
  - b. Differentiated thyroid carcinoma (DTC; Hurthle cell, papillary, follicular);
  - c. Anaplastic thyroid carcinoma (ATC);
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 12 years;
4. Disease is recurrent, advanced, or metastatic;
5. For MTC, documentation of *RET* mutant-positive disease (e.g., RET M918T);
6. For DTC or ATC, documentation of *RET* fusion-positive disease (e.g., CCDC6-RET, KIF5B-RET), and member is radioactive iodine-refractory (if radioactive iodine is appropriate);
7. For DTC, disease is not amenable to radioactive iodine therapy;
8. Retevmo is not prescribed concurrently with Gavreto;
9. Member has not received prior *RET* targeted therapy (e.g., Gavreto);
10. Prescribed as a single agent;
11. For brand Retevmo requests, member must use generic selpercatinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
12. Request meets one of the following (a, b, or c):\*
  - a. Weight < 50 kg: Dose does not exceed both (i and ii):
    - i. 240 mg per day;
    - ii. 4 capsules per day;
  - b. Weight ≥ 50 kg: Dose does not exceed both (i and ii):
    - i. 320 mg per day;
    - ii. 4 capsules per day;
  - c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

\*Prescribed regimen must be FDA-approved or recommended by NCCN

**Approval duration:**

**Medicaid/HIM** – 6 months

**Commercial** – 12 months or duration of request, whichever is less

**C. RET Fusion-Positive Solid Tumors (must meet all):**

1. Diagnosis of a locally advanced or metastatic solid tumor (*see Appendix D for examples*);
2. Prescribed by or in consultation with an oncologist;
3. Documentation of *RET* fusion-positive disease;
4. One of the following (a or b):
  - a. Disease has progressed on or following prior systemic treatment;
  - b. Member has no satisfactory alternative treatment options;
5. Retevmo is not prescribed concurrently with Gavreto;
6. Member has not received prior RET targeted therapy (e.g., Gavreto);
7. Prescribed as a single agent;
8. For brand Retevmo requests, member must use generic selpercatinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
9. Request meets one of the following (a, b, or c):\*
  - a. Weight < 50 kg: Dose does not exceed both (i and ii):
    - i. 240 mg per day;
    - ii. 4 capsules per day;
  - b. Weight ≥ 50 kg: Dose does not exceed both (i and ii):
    - i. 320 mg per day;
    - ii. 4 capsules per day;
  - c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

\*Prescribed regimen must be FDA-approved or recommended by NCCN

**Approval duration:**

**Medicaid/HIM** – 6 months

**Commercial** – 12 months or duration of request, whichever is less

**D. Histiocytic Neoplasms (off-label) (must meet all):**

1. Diagnosis of one of the following histiocytic neoplasms (a, b, or c):
  - a. Erdheim-Chester Disease
  - b. Langerhans Cell Histiocytosis;
  - c. Rosai-Dorfman Disease;
2. Prescribed by or in consultation with an oncologist or hematologist;
3. Documentation of *RET* fusion-positive disease;
4. Retevmo is not prescribed concurrently with Gavreto;
5. Member has not received prior RET targeted therapy (e.g., Gavreto);
6. Prescribed as a single agent;
7. For brand Retevmo requests, member must use generic selpercatinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
8. Request meets one of the following (a, b, or c):\*
  - a. Weight < 50 kg: Dose does not exceed both (i and ii):
    - i. 240 mg per day;
    - ii. 4 capsules per day;
  - b. Weight ≥ 50 kg: Dose does not exceed both (i and ii):
    - i. 320 mg per day;

- ii. 4 capsules per day;
- c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

*\*Prescribed regimen must be FDA-approved or recommended by NCCN*

**Approval duration:**

**Medicaid/HIM** – 6 months

**Commercial** – 12 months or duration of request, whichever is less

**E. Other diagnoses/indications** (must meet 1 or 2):

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**II. Continued Therapy**

**A. All Indications in Section I** (must meet all):

1. Currently receiving medication via Centene benefit, or documentation supports that member is currently receiving Retevmo for a covered indication and has received this medication for at least 30 days;
2. Member is responding positively to therapy;
3. Retevmo is not prescribed concurrently with Gavreto;
4. Member has not received prior *RET* targeted therapy (e.g., Gavreto);
5. For brand Retevmo requests, member must use generic selpercatinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
6. If request is for a dose increase, request meets one of the following (a, b, or c):\*
  - a. Weight < 50 kg: Dose does not exceed both (i and ii):
    - i. 240 mg per day;
    - ii. 4 capsules per day;
  - b. Weight ≥ 50 kg: Dose does not exceed both (i and ii):
    - i. 320 mg per day;
    - ii. 4 capsules per day;
  - c. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

*\*Prescribed regimen must be FDA-approved or recommended by NCCN*

**Approval duration:**

**Medicaid/HIM** – 12 months

**Commercial** – 12 months or duration of request, whichever is less

**B. Other diagnoses/indications** (must meet 1 of 2):

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**III. Diagnoses/Indications for which coverage is NOT authorized:**

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

ATC: Anaplastic thyroid carcinoma  
DTC: differentiated thyroid carcinoma  
FDA: Food and Drug Administration  
MTC: medullary thyroid cancer

NCCN: National Comprehensive Cancer Network  
NSCLC: non-small cell lung cancer  
RET: rearranged during transfection

*Appendix B: Therapeutic Alternatives*

Not applicable

*Appendix C: Contraindications/Boxed Warnings*

None reported

*Appendix D: Examples of RET Fusion-Positive Solid Tumors*

RET fusion-positive solid tumor types evaluated in the LIBRETTO-001 clinical study (NCT03157128) included:

- Pancreatic adenocarcinoma
- Colorectal
- Salivary
- Breast

- Sarcoma (soft tissue)
- Xanthogranuloma
- Carcinoid (bronchial)
- Carcinoma of the skin
- Cholangiocarcinoma
- Ovarian
- Pulmonary carcinosarcoma
- Rectal neuroendocrine
- Small intestine

**V. Dosage and Administration**

Indication	Dosing Regimen	Maximum Dose
NSCLC, thyroid cancer, RET fusion-positive solid tumors	Weight < 50 kg: 120 mg PO BID Weight ≥ 50 kg: 160 mg PO BID	Weight < 50 kg: 240 mg/day Weight ≥ 50 kg: 320 mg/day

**VI. Product Availability**

Capsules: 40 mg, 80 mg

**VII. References**

1. Retevmo Prescribing Information. Indianapolis, IN: Lilly USA, LLC; September 2022. Available at <http://pi.lilly.com/us/retevmo-uspi.pdf>. Accessed October 4, 2022.
2. Selpercatinib. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: [http://www.nccn.org/professionals/drug\\_compendium](http://www.nccn.org/professionals/drug_compendium). Accessed October 4, 2022.
3. National Comprehensive Cancer Network. Histiocytic Neoplasms Version 2.2021. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/histiocytic\\_neoplasms.pdf](https://www.nccn.org/professionals/physician_gls/pdf/histiocytic_neoplasms.pdf). Accessed February 15, 2022.
4. National Comprehensive Cancer Network. Thyroid Carcinoma Version 3.2021. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/thyroid.pdf](https://www.nccn.org/professionals/physician_gls/pdf/thyroid.pdf). Accessed February 15, 2022.

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created pre-emptively.	03.10.20	05.20
Drug is now FDA approved - criteria updated per FDA labeling: For NSCLC, failure of platinum-based chemotherapy and PD-1/PD-L1 therapy removed per FDA; recurrent, advanced or metastatic replaces advanced per FDA and NCCN; dosing added; for thyroid cancer, MTC restricted to mutant-positive rather than also fusion-positive; failure of systemic therapy removed per FDA; dosing added; references reviewed and updated.	06.02.20	08.20
Updated criteria to prevent concurrent use of Gavreto as well as history of RET target therapy.	09.23.20	11.20
2Q 2021 annual review: no significant changes; added generic redirection language to “must use” since oral oncology product; updated reference for HIM off-label use to HIM.PA.154 (replaces HIM.PHAR.21); references reviewed and updated.	01.26.21	05.21

Reviews, Revisions, and Approvals	Date	P&T Approval Date
2Q 2022 annual review: per NCCN added the following: added criterion for use as single-agent therapy for NSCLC and thyroid cancers, added qualifier of recurrent thyroid cancer, removed radioactive iodine criteria for ATC, revised DTC/MTC-specific criteria to align with Gavreto, and added indication criteria for histiocytic neoplasms; Commercial approval durations revised from “Length of Benefit” to “12 months or duration of request, whichever is less”; references reviewed and updated.	02.15.22	05.22
RT4: 1) added criteria for new FDA-approved indication of RET fusion-positive solid tumors and 2) revised FDA Approved Indications section to reflect updated label requiring use of an FDA-approved test for all other indications; template changes applied to other diagnoses/indications and continued therapy section.	10.04.22	

**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.

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.

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