

**Clinical Policy: Larotrectinib (Vitrakvi)**

Reference Number: CP.PHAR.414

Effective Date: 01.15.18

Last Review Date: 02.24

Line of Business: Commercial, HIM, Medicaid

[Revision Log](#)

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

**Description**

Larotrectinib (Vitrakvi<sup>®</sup>) is a first-generation selective tropomyosin receptor kinase (TRK) tyrosine kinase inhibitor (TKI).

**FDA Approved Indication(s)**

Vitrakvi is indicated for the treatment of adult and pediatric patients with solid tumors that:

- Have a neurotrophic receptor tyrosine kinase (*NTRK*) gene fusion without a known acquired resistance mutation,
- Are metastatic or where surgical resection is likely to result in severe morbidity, and
- Have no satisfactory alternative treatments or that have progressed following treatment.

Select patients for therapy based on an FDA-approved test. 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 trials.

**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 Vitrakvi is **medically necessary** when the following criteria are met:

**I. Initial Approval Criteria****A. NTRK Fusion-Positive Cancer** (must meet all):

1. Diagnosis of one of the following (a or b):
  - a. Solid tumor (*see Appendix D for examples*);
  - b. Histiocytic neoplasm (e.g., Erdheim-Chester disease, Langerhans Cell histiocytosis, Rosai-Dorfman disease) (off-label);
2. Prescribed by or in consultation with one of the following (a or b):
  - a. Oncologist;
  - b. For histiocytic neoplasm, a hematologist;
3. For Vitrakvi requests, member must use larotrectinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
4. Tumor is positive for an NTRK-gene fusion (e.g., ETV6-NTRK3, TPM3-NTRK1);
5. Confirmation of no known acquired tropomyosin receptor kinase resistance mutation;

6. For solid tumor: Disease is persistent, recurrent, advanced, metastatic, unresectable, or resectable with adverse functional outcomes;
7. Request meets one of the following (a or b):
  - a. Member must use Rozlytrek<sup>®\*</sup>, unless contraindicated or clinically significant adverse effects are experienced;  
*\*Prior authorization may be required for Rozlytrek.*
  - b. Request is for Stage IV or metastatic cancer for a State with regulations against step therapy in advanced oncology settings (*see Appendix E*);
8. For disease relapse or progression following Rozlytrek therapy, medical justification as to why additional NTRK targeted therapy is warranted;
9. Request meets one of the following (a, b, or c):\*
  - a. Adults and pediatric members with body surface area  $\geq 1.0 \text{ m}^2$ : Dose does not exceed 200 mg per day;
  - b. Pediatric members with body surface area  $< 1.0 \text{ m}^2$ : Dose does not exceed 200 mg/m<sup>2</sup> 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. 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. NTRK-Fusion Positive Cancer (must meet all):**

1. Currently receiving medication via Centene benefit, or documentation supports that member is currently receiving Vitrekvi for a covered indication and has received this medication for at least 30 days;
2. Member is responding positively to therapy;

3. For Vitrakvi requests, member must use larotrectinib, if available, unless contraindicated or clinically significant adverse effects are experienced;
4. If request is for a dose increase, request meets one of the following (a, b, c):\*
  - a. Adults and pediatric members with body surface area  $\geq 1.0 \text{ m}^2$ : New dose does not exceed 200 mg per day;
  - b. Pediatric members with body surface area  $< 1.0 \text{ m}^2$ : New dose does not exceed 200 mg/m<sup>2</sup> 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 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.

**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;
- B. Known acquired tropomyosin receptor kinase resistance mutation.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

FDA: Food and Drug Administration

NCCN: National Comprehensive Cancer  
Network

NTRK: neurotrophic receptor tyrosine kinase

TKI: tyrosine kinase inhibitor

TRK: tropomyosin receptor kinase

*Appendix B: Therapeutic Alternatives*

| Drug Name                               | Dosing Regimen   | Dose Limit/<br>Maximum Dose |                          |                          |            |   |                                 |                             |
|---|--|-----------------------------|--------------------------|--------------------------|------------|---|---------------------------------|-----------------------------|
| Rozlytrek <sup>®</sup><br>(entrectinib) | NTRK fusion-positive solid tumor<br>Adults: 600 mg PO QD<br>Pediatrics by body surface area (BSA):   | 600 mg/day                  |                          |                          |            |   |                                 |                             |
|   | <table border="1"> <thead> <tr> <th>Age</th> <th>Recommended daily dosage</th> </tr> </thead> <tbody> <tr> <td>&gt; 6 months</td> <td> <math>\leq 0.50 \text{ m}^2</math>: 300 mg/m<sup>2</sup> PO QD<br/> <math>0.51 \text{ to } 0.80 \text{ m}^2</math>: 200 mg PO QD<br/> <math>0.81 \text{ to } 1.10 \text{ m}^2</math>: 300 mg PO QD<br/> <math>1.11 \text{ to } 1.50 \text{ m}^2</math>: 400 mg PO QD<br/> <math>\geq 1.51 \text{ m}^2</math>: 600 mg PO QD                 </td> </tr> <tr> <td>&gt; 1 month to<br/><math>\leq 6</math> months</td> <td>250 mg/m<sup>2</sup> PO QD</td> </tr> </tbody> </table> |                             | Age                      | Recommended daily dosage | > 6 months | $\leq 0.50 \text{ m}^2$ : 300 mg/m <sup>2</sup> PO QD<br>$0.51 \text{ to } 0.80 \text{ m}^2$ : 200 mg PO QD<br>$0.81 \text{ to } 1.10 \text{ m}^2$ : 300 mg PO QD<br>$1.11 \text{ to } 1.50 \text{ m}^2$ : 400 mg PO QD<br>$\geq 1.51 \text{ m}^2$ : 600 mg PO QD | > 1 month to<br>$\leq 6$ months | 250 mg/m <sup>2</sup> PO QD |
|   | Age  |                             | Recommended daily dosage |                          |            |   |                                 |                             |
| > 6 months                              | $\leq 0.50 \text{ m}^2$ : 300 mg/m <sup>2</sup> PO QD<br>$0.51 \text{ to } 0.80 \text{ m}^2$ : 200 mg PO QD<br>$0.81 \text{ to } 1.10 \text{ m}^2$ : 300 mg PO QD<br>$1.11 \text{ to } 1.50 \text{ m}^2$ : 400 mg PO QD<br>$\geq 1.51 \text{ m}^2$ : 600 mg PO QD  |                             |                          |                          |            |   |                                 |                             |
| > 1 month to<br>$\leq 6$ months         | 250 mg/m <sup>2</sup> PO QD  |                             |                          |                          |            |   |                                 |                             |

*Therapeutic alternatives are listed as Brand name<sup>®</sup> (generic) when the drug is available by brand name only and generic (Brand name<sup>®</sup>) when the drug is available by both brand and generic.*

*Appendix C: Contraindications/Boxed Warnings*

None reported

*Appendix D: Examples of Solid Tumors*

*(Examples are drawn from the Vitrekvi pivotal trials, as described in the FDA prescribing information, as well as the National Comprehensive Center Network (NCCN) Vitrekvi compendium.)*

- Breast cancer
- Central nervous system cancers
- Cervical cancer
- Cholangiocarcinoma
- Colorectal cancer
- Epithelial ovarian cancer/fallopian tube cancer/primary peritoneal cancer
- Gastric cancer
- Hepatocellular carcinoma
- Lung cancer
- Melanoma
- Pancreatic cancer
- Salivary gland tumor
- Small bowel adenocarcinoma
- Soft tissue sarcoma (e.g., extremity/body wall, head/neck, retroperitoneal/intraabdominal, solitary fibrous tumor, infantile fibrosarcoma, gastrointestinal stromal tumor)
- Thyroid carcinoma (papillary, Hurthle cell, anaplastic, or follicular histology)

*Appendix E: States with Regulations against Redirections in Stage IV or Metastatic Cancer*

| State | Step Therapy Prohibited? | Notes  |
|-------|--------------------------|--|
| FL    | Yes                      | For stage 4 metastatic cancer and associated conditions. |

| State | Step Therapy Prohibited? | Notes   |
|-------|--------------------------|---|
| GA    | Yes                      | For stage 4 metastatic cancer. Redirection does not refer to review of medical necessity or clinical appropriateness.   |
| IA    | Yes                      | For standard of care stage 4 cancer drug use, supported by peer-reviewed, evidence-based literature, and approved by FDA.   |
| LA    | Yes                      | For stage 4 advanced, metastatic cancer or associated conditions. Exception if “clinically equivalent therapy, contains identical active ingredient(s), and proven to have same efficacy. |
| NV    | Yes                      | Stage 3 and stage 4 cancer patients for a prescription drug to treat the cancer or any symptom thereof of the covered person  |
| OH    | Yes                      | <i>*Applies to HIM requests only*</i><br>For stage 4 metastatic cancer and associated conditions  |
| OK    | Yes                      | <i>*Applies to HIM requests only*</i><br>For advanced metastatic cancer and associated conditions   |
| PA    | Yes                      | For stage 4 advanced, metastatic cancer   |
| TN    | Yes                      | For advanced metastatic cancer and associated conditions  |
| TX    | Yes                      | For stage 4 advanced, metastatic cancer and associated conditions   |

#### V. Dosage and Administration

| Indication                        | Dosing Regimen   | Maximum Dose |
|-----------------------------------|--|--------------|
| NTRK fusion-positive solid tumors | <ul style="list-style-type: none"> <li>Adult and pediatric patients with body surface area <math>\geq 1.0 \text{ m}^2</math>: 100 mg PO BID until disease progression or until unacceptable toxicity</li> <li>Pediatric patients with body surface area <math>&lt; 1.0 \text{ m}^2</math>: 100 mg/m<sup>2</sup> PO BID until disease progression or until unacceptable toxicity</li> </ul> | 200 mg/day   |

#### VI. Product Availability

- Capsules: 25 mg, 100 mg
- Oral solution (100 mL bottle): 20 mg/mL

#### VII. References

1. Vitrakvi Prescribing Information. Stamford, CT: Loxo Oncology, Inc.; November 2023. Available at: [www.vitrakvi.com](http://www.vitrakvi.com). Accessed November 20, 2023.
2. 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 November 20, 2023.
3. Drilon A, Laetsch TW, Kummar S, et al. Efficacy of larotrectinib in TRK fusion-positive cancers in adults and children. *N Eng J Med* 2018;378:731-9. DOI:10.1056/NEJMoa1714448.

| Reviews, Revisions, and Approvals   | Date     | P&T Approval Date |
|---|----------|-------------------|
| Added redirection to Rozlytrek per August SDC and prior clinical guidance.  | 08.19.20 |                   |
| 1Q 2021 annual review: oral oncology generic redirection language added; tumor subtype and subsequent therapy restrictions removed per NCCN; kinase resistance mutation confirmation added/if known, exclusion added (Section III); references to HIM.PHAR.21 revised to HIM.PA.154; references reviewed and updated.   | 11.14.20 | 02.21             |
| RT4: updated FDA indication to include additional language for use of a FDA-approved test.  | 04.08.21 |                   |
| 1Q 2022 annual review: added histiocytic neoplasm indication per NCCN category 2A with allowance for hematology specialty; clarified NTRK fusion-positive cancer could also be persistent per NCCN; added Legacy WellCare auth durations (WCG.CP.PHAR.414 to be retired); allowed by-passing of redirection if state regulations do not allow step therapy in Stage IV or metastatic cancer settings and added Appendix E; references reviewed and updated. | 12.06.21 | 02.22             |
| Revised approval duration for Commercial line of business from length of benefit to 12 months or duration of request, whichever is less   | 01.20.22 | 05.22             |
| Template changes applied to other diagnoses/indications and continued therapy section.  | 09.23.22 |                   |
| 1Q 2023 annual review: no significant changes; Legacy WellCare approval durations consolidated to 6/12 months; references reviewed and updated.   | 11.14.22 | 02.23             |
| Updated Appendix E to include Oklahoma.   | 06.07.23 |                   |
| 1Q 2024 annual review: in Appendix B, updated Rozlytrek recommended doses per updated PI; in Appendix D, added central nervous system cancers to example solid tumors; references reviewed and updated.   | 11.20.23 | 02.24             |

**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.

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