

Clinical Policy: Larotrectinib (Vitrakvi)

Reference Number: CP.PHAR.414

Effective Date: 01.15.18

Last Review Date: 02.25

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®) 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® 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[®]*, 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/m² 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 Vitrakvi 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/m² 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

Appendix B: Therapeutic Alternatives

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose				
Rozlytrek® (entrectinib)	NTRK fusion-positive solid tumor	600 mg/day				
	Adults: 600 mg PO QD					
	Pediatrics by body surface area (BSA):					
	<table><tr><th>Age</th><th>Recommended daily dosage</th></tr><tr><td>> 6 months</td><td>≤ 0.50 m²: 300 mg/m² PO QD 0.51 to 0.80 m²: 200 mg PO QD 0.81 to 1.10 m²: 300 mg PO QD 1.11 to 1.50 m²: 400 mg PO QD ≥1.51 m²: 600 mg PO QD</td></tr><tr><td>> 1 month to ≤ 6 months</td><td>250 mg/m² PO QD</td></tr></table>		Age	Recommended daily dosage	> 6 months	≤ 0.50 m²: 300 mg/m² PO QD 0.51 to 0.80 m²: 200 mg PO QD 0.81 to 1.10 m²: 300 mg PO QD 1.11 to 1.50 m²: 400 mg PO QD ≥1.51 m²: 600 mg PO QD
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> 1 month to ≤ 6 months	250 mg/m² PO QD					

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) 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.)

- Ampullary adenocarcinoma
- Biliary tract cancers
- Breast cancer
- Central nervous system cancers
- Cervical cancer
- Cholangiocarcinoma
- Colorectal cancer
- Epithelial ovarian cancer/fallopian tube cancer/primary peritoneal cancer
- Esophageal and esophagogastric junction cancer
- Gastric cancer
- Head and neck cancers
- 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)

- Uterine neoplasms
- Vaginal cancer
- Vulvar cancer

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.
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.
MS	Yes	<i>*Applies to HIM requests only*</i> For advanced metastatic cancer and associated conditions
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> For stage 4 metastatic cancer and associated conditions
OK	Yes	<i>*Applies to HIM requests only*</i> 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	• Adult and pediatric patients with body surface area $\geq 1.0 \text{ m}^2$: 100 mg PO BID until disease progression or until unacceptable toxicity • Pediatric patients with body surface area $< 1.0 \text{ m}^2$: 100 mg/m² PO BID until disease progression or until unacceptable toxicity	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. Accessed November 21, 2024.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed November 21, 2024.

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
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
Added Mississippi to Appendix E.	06.05.24	
1Q 2025 annual review: for Appendix D, added ampullary adenocarcinoma, biliary tract cancers, esophageal and esophagogastric junction cancer, head and neck cancers, uterine neoplasms, vaginal cancer, and vulvar cancer to example of solid tumors as supported by NCCN compendium; references reviewed and updated.	11.01.24	02.25

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.

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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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