

NTRK Fact Sheet

If a biomarker test shows you have NTRK positive (NTRK+) nonsmall cell lung cancer (NSCLC), what does that mean? This fact sheet explains the diagnosis and how it might affect your treatment.



WHAT IS NTRK?

NTRK, which stands for **neurotrophic tyrosine receptor kinase**, is a gene that can mutate by fusing to another gene. When this NTRK fusion occurs, it creates proteins that cause cancer to grow and spread. The NTRK mutation is found not only in lung cancers but also in some colorectal, soft tissue, head, neck, thyroid and brain cancer. The cause is not yet known. What we do know, however, is that blocking NTRK in NSCLC tumors can slow cancer growth.



WHO HAS NTRK+ LUNG CANCER?

A very small number of people with lung cancer — less than 1% — test positive for NTRK.



HOW DO DOCTORS TREAT NTRK+ LUNG CANCERS?

People with NTRK+ lung cancer may be eligible for targeted therapy prevent cancer from growing and spreading, while having fewer side effects than chemotherapy.

Two drugs to treat NTRK+ cancers, both given in pill form, have been approved by the U.S. Food and Drug Administration, **entrectinib (Rozlytrek) and larotrectinib (Vitrakvi)**. Rozlytrek is taken once a day and Vitrakvi twice a day. Clinical trials may provide access to other targeted treatments. It's important to note that people taking these drugs should regularly have blood tests to check their liver function.

Common side effects of these drugs include:

- Anemia (Vitrakvi only)
- Constipation or diarrhea
- Dizziness
- Fatigue
- Nausea and vomiting

Rozlytrek may also cause:

- Abnormal touch sensation
- Change in taste
- Shortness of breath
- Swelling

In rare cases, these drugs may cause liver or nervous system problems. In addition, Rozlytrek may cause heart, kidney and eye problems. Be sure to let your doctor know if you have any of these symptoms — dizziness, unclear speech, problems walking, a tingling or burning sensation, or numbness.