

# ROS1 Fact Sheet

If a biomarker test shows you have ROS1 positive (ROS1+) nonsmall cell lung cancer (NSCLC), what does that mean? This fact sheet explains the diagnosis and how it might affect your treatment.



## WHAT IS ROS1?

The ROS1 gene produces a protein that plays a role in cell growth and cell signaling, which is how cells communicate and keep your body working well. When the ROS1 gene changes, or mutates, by fusing to another gene, it's called an ROS1 rearrangement. This produces a malfunction in cell signaling that can cause cancer to grow and spread. The ROS1 mutation is not only found in lung cancers, but also in colorectal, stomach, ovarian, bile duct and brain cancers. The cause is not yet known.



## WHO HAS ROS1+ LUNG CANCER?

Although long-term smoking is a common cause of lung cancer that's not the case with ROS1. It's most often found in younger people, women, and non-smokers. Approximately 1-2% of lung cancer patients are ROS1 positive — usually those with adenocarcinoma.



## HOW DO DOCTORS TREAT ROS1+ LUNG CANCERS?

When you test positive for the ROS1 biomarker, you may benefit from a targeted therapy drug that has been formulated to block ROS1 and prevent the cancer from growing and spreading, while having far fewer side effects than chemotherapy.

Two drugs to treat ROS1+ cancers, both given in pill form, have been approved by the U.S. Food and Drug

Administration: **crizotinib (Xalkori) and entrectinib (Rozlytrek)**. Xalkori is taken twice a day and Rozlytrek once a day. Other drugs may be available in clinical trials.

### Common side effects of both drugs include:

- Changes in vision (blurry vision)
- Constipation
- Diarrhea
- Fatigue
- Loss of appetite or change in taste
- Nausea and vomiting
- Swelling

### Rozlytrek also may cause:

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

In rare cases, these drugs may cause heart, liver, kidney and eye problem. In addition, Rozlytrek can cause central nervous system problems and Xalkori can cause lung problems.