



## What is ROS1 positive (ROS1+) Lung Cancer?

### WHAT IS A BIOMARKER?

Biomarkers help identify what specific subtype of cancer you have. Cancer biomarkers are often referred to by a 3- or 4-letter abbreviation, such as RET or EGFR. Biomarkers are sometimes called molecular markers, cancer markers, or tumor markers. If you have advanced non-small cell lung cancer (NSCLC), ask to have comprehensive biomarker testing (which should include ROS1 testing) before you start treatment.

If you have non-small cell lung cancer and your tumor tests positive for the ROS1 biomarker, you have ROS1+ (ROS1 positive) lung cancer. This fact sheet explains what this means and how it may affect lung cancer treatment.

### WHAT IS ROS1?

ROS1 is a gene or the protein made by that gene. It plays a role cell growth and cell signaling. Cell signaling is the way cells talk with each other to ensure healthy body functioning. The ROS1 gene can move or

fuse to another gene. This is called ROS1 rearrangement. A change in a cancer cell's ROS1 gene or too much ROS1 protein can cause cancer to grow and spread. Doctors do not know why this happens. It is seen in some lung, colorectal, stomach, ovarian, bile duct, and brain cancers. Doctors have found that blocking ROS1 in non-small cell lung cancer tumors can slow cancer growth.

### WHO HAS ROS1+ LUNG CANCER?

ROS1 is more often found in younger people, women, and people who never smoked. Around 1 to 2 percent of people with lung cancer test positive for ROS1. They usually have a type of non-small cell lung cancer called adenocarcinoma.

### HOW DO DOCTORS TREAT ROS1+ LUNG CANCERS?

A positive test for the ROS1 biomarker means that you are eligible for targeted therapy. Targeted therapy drugs keep cancer from growing and spreading. These drugs may have fewer side effects than chemotherapy.

The U.S. Food and Drug Administration has approved two drugs to treat ROS1+ cancers. Both **crizotinib (Xalkori®)** and **entrectinib (Rozlytrek™)** are given as pills. Xalkori is taken twice daily. Rozlytrek is taken once daily. Other drugs may be available through 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 problems to the heart, liver, kidneys, eyes, central nervous system (Rozlytrek only), or lungs (Xalkori only).

For information on coping with side effects, visit [www.CancerSupportCommunity.org/SideEffects](http://www.CancerSupportCommunity.org/SideEffects).

## **ROS1+ LUNG CANCER AND BIOMARKER TESTING INFORMATION**

**Cancer Support Community** · *Frankly Speaking About Lung Cancer* program · [www.CancerSupportCommunity.org/Lung](http://www.CancerSupportCommunity.org/Lung)

**Cancer Support Community** · *Frankly Speaking About Cancer Targeted Therapy and Biomarker Testing for Lung Cancer* booklet · download or order from [orders.CancerSupportCommunity.org](http://orders.CancerSupportCommunity.org)

**Cancer Support Community** · *Frankly Speaking About Cancer Lung Cancer* book · download or order from [orders.CancerSupportCommunity.org](http://orders.CancerSupportCommunity.org)

**The ROS1ders** · [www.ros1cancer.com](http://www.ros1cancer.com)



## LUNG CANCER RESOURCES

American Cancer Society · 800-227-2345 · [www.Cancer.org](http://www.Cancer.org)

American Lung Association · 800-586-4872 · [www.lung.org](http://www.lung.org)

CancerCare · 800-813-4673 · [www.CancerCare.org](http://www.CancerCare.org)

Cancer.net · 888-651-3038 · [www.cancer.net](http://www.cancer.net)

GO2 Foundation for Lung Cancer · 800-298-2436 · [www.go2foundation.org](http://www.go2foundation.org)

Lung Cancer Research Foundation · 844-835-4325 · [www.lcrf.org](http://www.lcrf.org)

LUNgevity Foundation · 321-407-6100 · [www.LUNgevity.org](http://www.LUNgevity.org)

National Cancer Institute (NCI) · 800-422-6237 · [www.cancer.gov](http://www.cancer.gov)

NCI Clinical Trial Information · 800-422-6237 · [www.cancer.gov/ClinicalTrials](http://www.cancer.gov/ClinicalTrials)

Patient Advocate Foundation · 800-532-5274 · [www.patientadvocate.org](http://www.patientadvocate.org)

## CANCER SUPPORT COMMUNITY RESOURCES

**Cancer Support Helpline®** — Have questions, concerns or looking for resources? Call CSC's toll-free Cancer Support Helpline (888-793-9355), available in 200 languages Mon-Fri 9am-8pm ET and Sat 9am-5pm ET.

**Open to Options®** — Preparing for your next appointment? Our trained specialists can help you create a list of questions to share with your doctor. Make an appointment by calling 888-793-9355 or by contacting your local CSC or Gilda's Club.

**Frankly Speaking About Cancer®** — Trusted information for cancer patients and their loved ones is available through publications, online, and in-person programs.

**Services at Local CSCs and Gilda's Clubs** — With the help of 170 locations, CSC and Gilda's Club affiliates provide services free of charge to people touched by cancer. Attend support groups, educational sessions, wellness programs, and more at a location near you. [www.CancerSupportCommunity.org/FindLocation](http://www.CancerSupportCommunity.org/FindLocation).

**Cancer Experience Registry®** — Help others by sharing your cancer patient or cancer caregiver experience via survey at [www.CancerExperienceRegistry.org](http://www.CancerExperienceRegistry.org).

**MyLifeLine** — CSC's private, online community allows patients and caregivers to easily connect with friends and family to receive social, emotional, and practical support throughout the cancer journey and beyond. Sign up at [www.MyLifeLine.org](http://www.MyLifeLine.org).

**Grassroots Network** — Make sure your voice is heard by federal and state policy makers on issues affecting cancer patients and survivors by joining our Network at [www.CancerSupportCommunity.org/become-advocate](http://www.CancerSupportCommunity.org/become-advocate).

Photos are stock images posed by models.

The Cancer Support Community and its partners provide this information as a service. This publication is not intended to take the place of medical care or the advice of your doctor. We strongly suggest consulting your doctor or other health care professionals to answer questions and learn more.

This publication is available to download and print yourself at [www.CancerSupportCommunity.org/lung](http://www.CancerSupportCommunity.org/lung). For print copies of this publication or other information about coping with cancer, visit [Orders.CancerSupportCommunity.org](http://Orders.CancerSupportCommunity.org)

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Lung Biomarker Digital Tool  
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