



What is KRAS positive (KRAS+) 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 ALK 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 will include KRAS testing) before you start treatment.

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

WHAT IS KRAS?

KRAS is both a gene and a protein made by the gene. KRAS controls cell growth. A change to KRAS in your cancer can lead to cell growth. This is called a mutation and can cause cancer to grow. A KRAS mutation can be caused by factors like smoking or radon. It can also happen without

a known cause. It is seen mutated in some lung cancers, colorectal cancers, and pancreatic cancer.

WHO HAS KRAS+ LUNG CANCER?

A change in the KRAS gene is more often found in people who have a history of smoking. Around 13 percent of people with non-small cell lung cancer test positive for the G12C KRAS mutation. They almost always have a type of non-small cell lung cancer called adenocarcinoma.

HOW DO DOCTORS TREAT KRAS+ LUNG CANCERS?

A positive test for the KRAS biomarker does not always mean that you are eligible for targeted therapy. There are many types of mutations. Only one (G12C) currently has an approved targeted therapy. Targeted therapy drugs keep cancer from growing and spreading. These drugs may have fewer side effects than chemotherapy. The drugs for KRAS+ cancer are called RAS GTPase family inhibitors. They aim to block the mutated KRAS protein.

The U.S. Food and Drug Administration has approved one drug to treat KRAS+ advanced NSCLC. Sotorasib (Lumakras™) is given as a pill that is taken once daily. It is only given to patients who have received prior systemic treatment. Other drugs may be available through clinical trials.

In rare cases, Lumakras™ may cause problems in the heart, liver, kidneys, central nervous system, or lungs.

For information on coping with side effects, visit www.CancerSupportCommunity.org/SideEffects.

Common side effects of this drug include:

- Diarrhea
- Nausea
- Fatigue
- Cough

KRAS+ LUNG CANCER AND BIOMARKER TESTING INFORMATION

Cancer Support Community · *Frankly Speaking About Lung Cancer* program · 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

Cancer Support Community · *Frankly Speaking About Cancer Lung Cancer* book · download or order from orders.CancerSupportCommunity.org

KRAS Kickers · www.KrasKickers.org

GO2 Foundation for Lung Cancer · 800-298-2436 · www.go2foundation.org/lungmatch

LUNgevity Foundation · 844-360-5864 · www.LUNgevity.org/biomarkertesting



LUNG CANCER RESOURCES

American Cancer Society · 800-227-2345 · www.Cancer.org

American Lung Association · 800-586-4872 · www.lung.org

CancerCare · 800-813-4673 · www.CancerCare.org

Cancer.net · 888-651-3038 · www.cancer.net

GO2 Foundation for Lung Cancer · 800-298-2436 · www.go2foundation.org

Lung Cancer Research Foundation · 844-835-4325 · www.lcrf.org

LUNgevity Foundation · 321-407-6100 · www.LUNgevity.org

National Cancer Institute (NCI) · 800-422-6237 · www.cancer.gov

NCI Clinical Trial Information · 800-422-6237 · www.cancer.gov/ClinicalTrials

Patient Advocate Foundation · 800-532-5274 · 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.

Cancer Experience Registry® — Help others by sharing your cancer patient or cancer caregiver experience via survey at 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.

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.

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. For print copies of this publication or other information about coping with cancer, visit Orders.CancerSupportCommunity.org

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Lung Biomarker Digital Tool
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