



## What is EGFR positive (EGFR+) 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 EGFR testing) before you start treatment.

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

### WHAT IS EGFR?

EGFR (epidermal growth factor receptor) is both a gene and a protein made by the gene. The protein helps cells grow and divide. EGFR genes in cancer cells can mutate and stop working properly. A mutation is a change in a cell's genes that may lead to cancer growth. Doctors do not know why this happens. They have found that blocking

EGFR in non-small cell lung cancer tumors can slow cancer growth.

### WHO HAS EGFR+ LUNG CANCER?

EGFR is more often found in people of East Asian descent, women, and people who never smoked or are light smokers. Around 15 percent of people with non-small cell lung cancer test positive for EGFR. They usually have a type of non-small cell lung cancer called adenocarcinoma.

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

A positive test for the EGFR 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. Most drugs for EGFR+ cancer are tyrosine kinase inhibitors. They aim to block the EGFR protein. One drug, Rybrevant™, is a bispecific antibody treatment.

The U.S. Food and Drug Administration has approved the drugs listed below to treat EGFR-positive NSCLC. Most are given as a pill to be taken once per day. Rybrevant™

is given by IV (in the vein) every 2-4 weeks. Portrazza® is approved to treat advanced squamous cell lung cancer. It is given through a vein with chemotherapy. Other drugs may be available through clinical trials. Which treatment you receive may depend on your subtype of EGFR. If the first drug you try does not work or stops working, ask your doctor about trying another. You may need to get more biomarker testing done at this stage.

- Afatinib (Gilotrif®)
- Amivantamab (Rybrevant™)
- Dacomitinib (Vizimpro®)
- Erlotinib (Tarceva®)
- Gefitinib (Iressa®)
- Mobocertinib (Exkivity®)
- Necitumumab (Portrazza®)
- Osimertinib (Tagrisso®)
- Ramucirumab (Cymramza®)\*

\*Given in combination with Tarceva®

Common side effects of these drugs include:

- Breathing problems (Rybrevant™ only)
- Diarrhea
- Fatigue
- Infusion reactions (Rybrevant™ only)
- Loss of appetite
- Mouth sores
- Nail infection
- Nausea and vomiting
- Skin changes (acne-like rash, dry skin, itchiness)
- Swelling

In rare cases, these drugs may cause problems in the heart, lungs, liver, or eyes.

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

## **EGFR+ 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)

**EGFR Resisters** · [www.egfrcancer.org](http://www.egfrcancer.org)

**Exon 20 Group** · [www.exon20group.org](http://www.exon20group.org)



## 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)

Frankly Speaking About Cancer:  
Lung Biomarker Digital Tool  
PROGRAM PARTNER



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