GO2 FOR LUNG CANCER

PATIENT SUPPORT

Targeted Therapy for Non-Small Cell Lung Cancer

go2.org

GO2 Patient Support

For Everyone Impacted by Lung Cancer

We put people living with and at risk for lung cancer at the center of everything we do. From finding care to staying informed and building your resources, we are your community. As your friends, your guides, your advocates, your support system, **GO2 is your go-to.**

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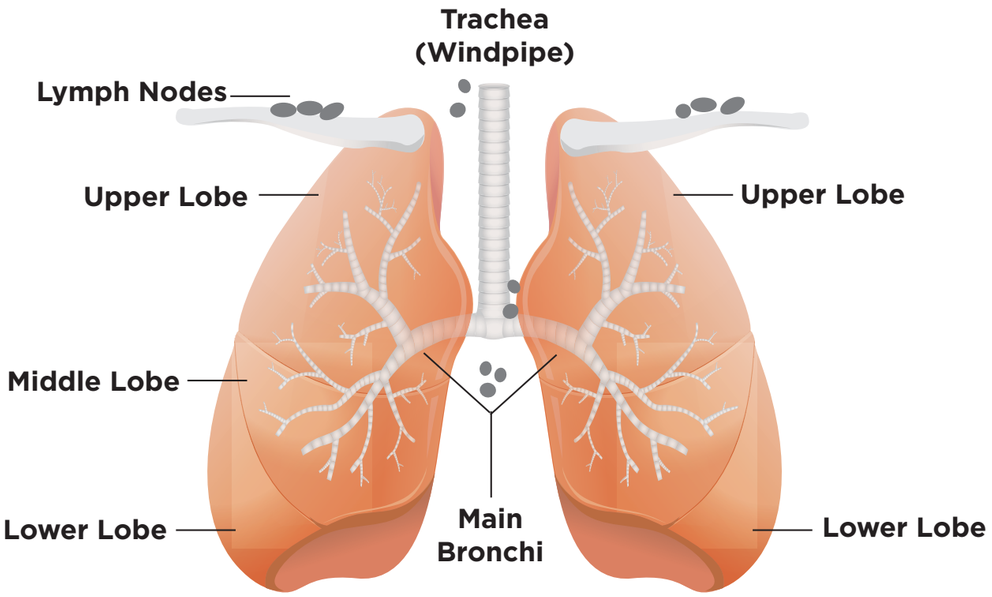
Targeted therapy is a type of cancer treatment that finds and kills cancer by attacking a change in the cell that makes cancer grow and spread.

This booklet was created to help you learn about targeted therapy treatments for non-small cell lung cancer (NSCLC). It includes information on what targeted therapies are, the testing needed to know if this treatment may be right for you, common targeted therapy drugs, and their possible side effects. We have also included a Side Effects Tracker and a list of questions you can bring to appointments with your healthcare team.

Many have found the support of family, friends, and social or faith groups to be helpful in coping with lung cancer. If you would like to connect with other people living with lung cancer and learn more about support groups or GO2's Phone Buddy program, call us at 1-800-298-2436 or email support@go2.org.

The Lungs



Non-Small Cell Lung Cancer

Lung cancer is one of the most common cancers in the United States, and non-small cell lung cancer (NSCLC) is the most common type of lung cancer. NSCLC is divided into four stages, I, II, III, IV (1, 2, 3, 4). Each of the four stages is further broken down into sub-stages using letters (A, B, C).

The stage of the cancer is determined by its size and where it is located in your body. Knowing your stage is important because it guides your treatment options, including whether targeted therapy is right for you.

If you would like to learn more about NSCLC and the stages, please visit go2.org/education.

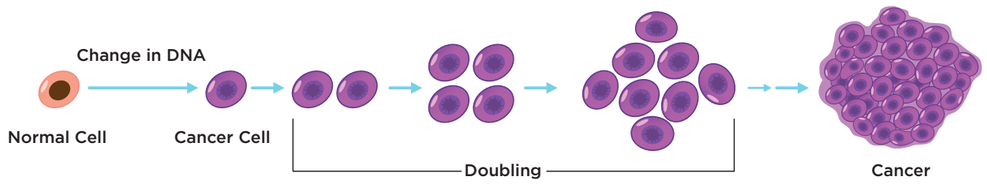
Targeted Therapy

To best understand targeted therapies, it's helpful to know a little bit about how healthy cells work and how they are different from cancer cells.

Cells are the basic building blocks that make up all the parts of your body. Each cell has information inside of it that tells it what to do. Cells carry your DNA or hereditary material. Healthy cells grow, mature, and are then replaced by other healthy cells.

Mistakes sometimes happen when the body makes new cells. These mistakes change the information inside the cell. When changed cells divide or double, they make more changed cells. Sometimes the changed cells stick together and form tumors. This is how cancer develops.

Process of cancer cell development



The changes inside cancer cells that make them different from healthy cells are called **biomarkers**. They are what drive cancer cells to grow and spread.

Targeted therapy drugs work by attacking a "target" in cancer cells. The target is the exact type of biomarker found in each person's cancer cells. There are many different targeted therapy drugs, and each one is designed to attack a certain kind of cancer cell "target" or biomarker.

Biomarkers

Biomarker testing is needed to look for the type of biomarkers you have and see if targeted therapy is an option for you.

What is a biomarker test?

Biomarker tests look closely at cancer cells in a tissue or a blood sample to find the exact change that happened inside the cell. The test results will list your biomarkers, which are then used to guide your healthcare team toward the best treatment for you.

How do biomarker test results guide treatment options?

- If your biomarker test results include one of the biomarkers that has a targeted therapy, then your best treatment will most often be a targeted therapy drug. This type of treatment works very well because it targets your exact cancer type.
- If your test results do not include a biomarker that has targeted therapy, you will be treated using one or more other common treatments such as chemotherapy, radiation, or immunotherapy. You may also think about joining a clinical trial for a new targeted therapy being studied.

Clinical trials can offer more treatment options. A clinical trial is a study done by a team of doctors, nurses, and other healthcare providers to find new ways to treat lung cancer safely. If you have any questions about clinical trials for targeted therapy and/or your treatment options, our LungMATCH team can help. Call the GO2 HelpLine at 1-800-298-2436. go2.org/lungmatch

When should biomarker testing be done?

- Biomarker testing should be done at diagnosis before you start your first treatment. This makes sure your treatment is just right for you.
- Repeat biomarker testing should be done if you are on a targeted therapy drug and it stops working well. If cancer starts growing again, you may have new biomarkers. Repeat testing can see if a different targeted therapy is a better treatment option for you now.

People with NSCLC should ask for biomarker testing that looks for many biomarkers at one time rather than only a few. This is called **comprehensive biomarker testing** and will make sure your healthcare team knows all your treatment options.

It's important to talk with your healthcare team to make sure you understand the results of your biomarker test and how the results are being used to guide your treatment.

For more information on biomarkers or to get help understanding your biomarker results, contact our treatment and trial navigators team at 1-800-298-2436 or email support@go2.org.

Difference Between Targeted Therapy and Other Treatments

Targeted therapy drugs kill cancer cells by zeroing in on the part of the cell that makes it different from healthy cells. For this reason, the healthy cells in the body are often not affected by targeted therapy and there can be fewer side effects. Targeted therapy drug(s) are chosen to match the exact change (biomarker) in your type of cancer cell that makes it different from healthy cells. Many targeted therapies also stop cancer cells from growing and dividing.

Chemotherapy works by killing cells in the body that grow fast and act like cancer cells. For this reason, some healthy cells in the body that grow fast (like hair cells) are also affected by chemotherapy. The type of chemotherapy drug(s) chosen for you will be based on the research that shows what works best for the type of cancer you have as well as many other health factors.

Immunotherapy works by helping your body's own immune system find and attack cancer cells. The type of immunotherapy drug(s) chosen for you is based on set guidelines that look at your type and stage of cancer, and the timing of other treatments you may need. The results of biomarker testing can also provide helpful information.

It's common to be treated with more than one of these therapies at the same time. This can impact what side effects you may have. To learn more about NSCLC side effects and ways to manage them, see our NSCLC Managing Side Effects booklet at go2.org/nsclc or contact our HelpLine at 1-800-298-2436.

Targeted Therapy Side Effects

You may not have any side effects from targeted therapy, or you may have just a few.

Side effects from targeted therapy drugs will vary depending on the drug and many other health factors. Some can be severe. Ask your healthcare team what the common side effects are for your specific targeted therapy drug and know what side effects require urgent medical attention.

Examples of possible side effects of targeted therapy:

- Rash
- Diarrhea
- Vision problems
- Tiredness or fatigue
- Nausea
- Heart and lung problems

This is not a complete list of side effects. To see common side effects for each targeted therapy drug, please ask your healthcare team. The American Cancer Society's webpage also has a list of side effects at www.cancer.org/cancer/lung-cancer/treating-non-small-cell/targeted-therapies.html.

Palliative Care

Ask your healthcare team about palliative care to prevent and/or relieve the side effects of cancer and cancer treatment. Studies show that starting palliative care at diagnosis improves quality of life, helps with depression, and improves rates of survival.

Side Effects Tracker

You may use this form to track your symptoms and share it with your healthcare team.

Date/Time	What symptoms or side effects are you having?	How severe is it? 1=mild 2=medium 3=severe	What made it better? What made it worse?	Did you take all medicines as prescribed today?

Targeted Therapy Drugs for Non-Small Cell Lung Cancer

Most targeted therapy treatments come in the form of a pill, but a few are given through a vein. The drug names that end in -ib are pills and can be taken at home. The drug names that end in -mab are given through a vein (IV). This is done at a cancer center and takes a few hours.

There may be one or more targeted therapy drugs for your biomarker type. Some are given alone, and some are combined with other drugs.

Note: Biomarker names can be very long, so they are shortened and are named by taking a few letters from their longer name. Below is a list of targeted therapy drugs that are approved by the Food and Drug Administration (FDA) and the biomarkers (EGFR, ALK, ROS1, etc.) they are designed to target. Your healthcare team will choose a targeted therapy according to your biomarker.

Biomarker	Brand Name	Generic Name
EGFR	Gilotrif	afatinib
	Iressa	gefitinib
	Tagrisso	osimertinib
	Tarceva	erlotinib
	Tarceva with Cyramza	erlotinib with ramucirumab
	Vizimpro	dacomitinib

Targeted Therapy Drugs for Non-Small Cell Lung Cancer

Biomarker	Brand Name	Generic Name
EGFR-Exon 20	Rybrevant	amivantamab-vmjw

Biomarker	Brand Name	Generic Name
ALK	Alecensa	alectinib
	Alunbrig	brigatinib
	Lorbrena	lorlatinib
	Xalkori	crizotinib
	Zykadia	ceritinib

Biomarker	Brand Name	Generic Name
ROS1	Rozlytrek	entrectinib
	Xalkori	crizotinib

Biomarker	Brand Name	Generic Name
BRAF	Mekinist with Tafinlar	trametinib with dabrafenib
	Braftovi with Mektovi	encorafenib with binimetinib

Biomarker	Brand Name	Generic Name
RET	Gavreto	pralsetinib
	Retevmo	selpercatinib

Biomarker	Brand Name	Generic Name
MET	Tabrecta	capmatinib
	Tepmetko	tepotinib

Biomarker	Brand Name	Generic Name
NTRK	Rozlytrek	entrectinib
	Vitrakvi	larotrectinib

Targeted Therapy Drugs for Non-Small Cell Lung Cancer

Biomarker	Brand Name	Generic Name
KRAS	Lumakras	sotorasib

Biomarker	Brand Name	Generic Name
HER2	Enhertu	trastuzumab deruxtecan

	Brand Name	Generic Name
Other Targeted Therapy Drugs	Avastin	bevacizumab
	Mvasi	bevacizumab-awwb (Other generics are also available)

**Cyramza can be used with chemo in NSCLC that doesn't have an identified biomarker.*

Ask Your Healthcare Team

Questions about biomarker testing and targeted therapy:

- Have I had comprehensive biomarker testing? If the answer is no, ask for it.
- What are my biomarker results?
- Can my biomarker(s) be treated with targeted therapy?
- Will I have targeted therapy as a pill or through an IV (in a vein)?
- How often will I get targeted therapy?

Questions about side effects:

- What side effects are common with the targeted therapy drug I am taking?
- What side effects are more serious and whom should I call if I have them?
- What can I do to prevent or decrease possible side effects?
- How can palliative care help with my side effects?

Next Steps

Ask for comprehensive biomarker testing.

Know your biomarker results and what they mean.

Talk with your team about targeted therapy options.

Share in decision-making about your treatment.

For more information about lung cancer, current treatments, support options, and/or referrals to other resources, please visit go2.org, call our HelpLine at 1-800-298-2436, or email support@go2.org.

Confronting Lung Cancer Starts Here

support@go2.org
1-800-298-2436