Biomarkers are mutations or changes inside cancer cells that make them different from healthy cells. Biomarkers drive cancer cells to grow and spread. Biomarker testing tells your healthcare team what mutations or changes you have. Your results guide your team to the best treatment for you. Asking for comprehensive biomarker testing is best because it looks for all known biomarkers instead of just a few.

If your test results include one of the biomarkers that have a targeted therapy, then your best treatment will most often be a targeted therapy. Targeted therapies are made to kill cancer cells by “targeting” your exact biomarkers without hurting other cells.

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 surgery, radiation therapy, and/or chemotherapy. Other biomarkers, like PD-L1 are used to help make decisions about immunotherapy.

Questions? Email us at support@go2.org or call our HelpLine at 1-800-298-2436.
Common Questions

Who needs biomarker testing?

All people with non-small cell lung cancer (NSCLC) should get biomarker testing. This includes all stages and all types of NSCLC.

How is biomarker testing done?

Testing may be done using a piece of tissue from a tumor (tissue biopsy) or a blood sample (liquid biopsy). Ask your healthcare team which one is best for you.

When is biomarker testing done?

The most important times to have biomarker testing are:

- At diagnosis, before you start your first treatment. This makes sure your treatment is just right for you.
- If targeted therapy stops working well and cancer starts growing again. When a targeted therapy stops working, cancer may have new biomarkers. Repeat testing can see if a different targeted therapy is the best treatment for you.

Biomarker test results can also lead you to clinical trials which 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 biomarker testing, your test results, or your treatment options, our LungMATCH team can help. Call the GO2 HelpLine at 1-800-298-2436.

Next Steps:

Ask for comprehensive biomarker testing.
Know your biomarker results and what they mean.
Talk with your team about your treatment plan.
Share in decision-making about your treatment.