



# NEW LUNG CANCER TREATMENT POSSIBILITIES

## THROUGH MOLECULAR TUMOR TESTING

### WHAT IS MOLECULAR TUMOR TESTING?

---

When your doctors suspected you had cancer, they had to take a small portion of your tumor (a biopsy) to have it examined. As part of that examination, a specialized doctor, called a pathologist, looked at your tumor cells under the microscope and found out you had lung cancer. The pathologist should also have been able to tell whether you have small cell lung cancer or non-small cell lung cancer (NSCLC).

Now, more detailed testing can be done on your tumor if your doctor requests it. These tests are sometimes referred to as molecular testing, and may involve:

- looking for changes (mutations) in the DNA make-up of the tumor.
- looking at levels of specific proteins present in the tumor.

These characteristics cannot generally be passed from one generation to the next.



free to breathe  
a partnership for lung cancer survival



## WHY SHOULD MY TUMOR BE TESTED?

Multiple treatment options exist.

---

**Targeted Therapies** - When particular tumor characteristics are found through molecular testing, special lung cancer treatments designed to “target” these characteristics may be offered to you as an option for treatment. It is important to know if you have a tumor with one of these characteristics so you and your doctor can make well-informed decisions about your treatment.

Characteristics that can be targeted with treatments currently available include (as of the writing of this resource):

- Epidermal Growth Factor Receptor (EGFR) mutation
- Anaplastic Lymphoma Kinase (ALK) gene rearrangement

EGFR and ALK mutations turn on processes in tumors that make cancer cells uncontrollably grow and divide. Targeted therapies work by turning off these processes.

Testing for EGFR and ALK mutations is particularly recommended if you have the adenocarcinoma sub-type of NSCLC, though other sub-types can also contain these characteristics. Generally, if one of these tumor characteristics is present, the other is not.

**Clinical Trials** - Even if your tumor is negative for EGFR and ALK mutations, your tumor can still be tested for other characteristics that may allow you to access a new targeted therapy through a clinical trial.

---

**TO FIND CLINICAL TRIALS** for your cancer treatment, call 1.800.698.0931 or visit [emergingmed.com/networks/freetobreathe](https://emergingmed.com/networks/freetobreathe)



## HOW DO I GET MY TUMOR TESTED?

---

If there is enough tissue from the original biopsy of your tumor, this tissue can be tested. If not, you may need a second biopsy or minor surgery to get enough tissue to test. Results are usually sent back to your doctor between one and three weeks later.

If your doctor doesn't recommend tumor testing for you, it is okay for you to ask why not. Testing may not be appropriate in all cases, but it is best for you to know as much as you can about your disease so you and your doctors can be full partners in your care. If you have questions about the response you receive from your doctor, it is okay to ask for a second opinion from another doctor.

## WHERE CAN I GO TO GET MY TUMOR TESTED?

---

Many major medical centers, including members of the Lung Cancer Mutation Consortium (LCMC), offer molecular testing for lung cancer patients. If your medical center does not provide this testing, consider visiting an LCMC institution. **Visit [golcmc.com](http://golcmc.com) to find an institution near you.**

## WHAT WILL IT COST TO GET MY TUMOR TESTED?

---

Most lung cancer tumor testing is covered by insurance. If you have concerns about whether your insurance will pay for tumor testing, talk with your nurse, social worker or insurance representative.



## WHAT IF MY TEST RESULTS DON'T QUALIFY ME FOR TARGETED TREATMENT?

---

Even if your tumor does not have known characteristics that can be matched to a targeted treatment that is available commercially or through a clinical trial, molecular testing can still help you and your doctor decide on the right treatment option for you. In these cases, the very best care will still be given to you.

---

**FOR ADDITIONAL** information on lung cancer, molecular testing and where to find a lung cancer doctor, please visit [freetobreathe.org](http://freetobreathe.org)

