

EXPERT [ACT]IVATION TIPS

[ACT]IVATION TIP: "To have access to personalized medicine, whether it's a surgical biopsy or a radiologic biopsy by a radiologist, you always make the statement: 'I would like biomarker testing for my biopsy specimen, and I would like to consider the testing that goes along with research protocols too.'" - Dr. Samuel Cykert

[ACT]IVATION TIP: "For things like biomarker testing and advanced treatments, you need to go to the closest high volume and specialized lung cancer center." - Dr. Samuel Cykert

[ACT]IVATION TIP: "Really over the last half-dozen years, biomarker testing has become so important because in advanced disease, biological treatments have actually shown good benefits for a lot of patients and for some patients, just explosive benefits. It's very important to get a battery of biomarker tests, just to understand, as a patient, if you're eligible for one of these treatments that are really good in terms of improving length and quality of life." - Dr. Samuel Cykert

[ACT]IVATION TIP: "There's a lot of work being done on the research side of biomarker testing and biomarker treatments, so if a patient is to qualify for a really strong research study, biomarker testing is just something that's very, very important. There are tremendous reasons to go ahead and get tested, and so my tip is since not every patient gets tested, make sure you discuss with the doctor who's doing the biopsy that I really want biomarker testing." - Dr. Samuel Cykert

[ACT]IVATION TIP: "I would recommend that rural patients who have presumptive diagnosis or suspicion of lung cancer, for instance, a large mass, a greater than 2 centimeter mass on an x-ray or a CT scan, that those patients ask to be referred to the closest high volume center. We also have to have close interactions with our rural colleagues so that they're comfortable of treating aggressively things that are well-treatable in the rural environment and going on to the high-volume centers, the more specialized centers, when things have to be done more aggressively." - Dr. Samuel Cykert

[ACT]IVATION TIP: "In our past research, we discovered that there are certain implicit biases and communication biases that affect patients of color, and because of that, I think it's really important for patients to tell their healthcare provider that 'I'm very enthusiastic about getting treatment, and biomarker testing would be good and I'm positive about it, how do you feel about it?' Engage the clinician in the conversation so they really know that you're part of the team and they're part of the team, and you're ready to move toward excellent treatment and you're willing to consider even research stuff." - Dr. Samuel Cykert

[ACT]IVATION TIP: "Looking at any biomolecular testing at any stage of the cancer, 55 percent of white patients and 44 percent of Black patients do biomolecular testing at any stage of cancer. and I want to point out that for Asian patients and Latinx patients, the numbers were also low, but there weren't enough patients in the database to achieve statistical significance. But really these numbers should be close to 100 percent for everyone, at least in basic markers like ALK, EGFR, and PD-L1." - Dr. Samuel Cykert

BIOMARKER TESTING FOR NSCLC PATIENTS

1. Eligibility

- All lung cancer patients should receive biomarker testing at diagnosis, before beginning treatment. Make sure you ask your care team to perform a tissue biopsy or get a cytology sample

2. Types of Biomarkers

- EGFR (Epidermal Growth Factor Receptor)
- ALK (Anaplastic Lymphoma Kinase)
- BRAF
- ROS1
- RET (Ret Proto-Oncogene)
- NTRK (Neurotrophic Tyrosine Receptor Kinase)
- KRAS G12C
- MET exon 14 skipping mutations
- PD-L1 (Programmed Death-Ligand 1): Determines eligibility for immunotherapy
- HER2: more common in breast cancer but can occur

[Source]

RESOURCES

- [American Lung Association](#)
- [Lung Cancer Research Foundation](#)
- [LUNGevity](#)
- [Lung Cancer Alliance](#)
- [Lung Cancer Foundation of America](#)
- [ALK Positive](#)
- [EGFR Resisters](#)
- [KRAS Kickers](#)
- [NTRKers](#)
- [TheROS1ders](#)
- [Cancer Support Community](#)
- [Black Doctor](#)
- [Latino Cancer Institute](#)
- [American Cancer Society](#)
- [National Cancer Institute](#)

AVOIDING BARRIERS TO BIOMARKER TESTING

- 1. **Understand the importance of biomarker testing.** Biomarker testing helps identify specific genetic alterations in your tumor. These alterations guide treatment decisions and improve overall survival.
- 2. **Schedule a meeting with your doctor.** Discuss diagnosis and request testing for biomarkers using your initial tissue biopsy. This is crucial for all NSCLC patients, regardless of ethnicity or location. Talk about what biomarkers to test for (see above box)
- 3. **Be persistent.** If your doctor doesn't mention biomarker testing, advocate for it. Don't hesitate to ask questions.
- 4. **Explore telehealth services if you're in a rural area and to reduce travel burden.** Virtual consultations can connect you with specialists. Carpooling, community shuttles, or volunteer services can also help when traveling to medical facilities.
- 5. **Look for healthcare providers who speak your language.** Clear communication is essential for understanding biomarker testing options. Utilize professional interpreters.
- 6. **Stay informed.** Communicate regularly with your healthcare team, ask questions, and remain updated on advancements.

[Sources: 1,2]