



WHAT IS BIOMARKER TESTING?

Biomarker testing is the use of a laboratory test to measure genes, proteins, or other substances (biomarkers) found in blood or tissue. It can provide insights into what drives cancer to grow.

WHY DO WE USE BIOMARKER TESTING?

We use it to gather individualized information about the cancer to choose treatments specifically designed to target what makes the cancer grow. Some therapies only work for people whose cancer shows a certain biomarker.



**MORE
EFFECTIVE**



**OFTEN FEWER
SIDE EFFECTS**

WHEN TO TEST FOR BIOMARKERS?

- o At diagnosis of stage IV or metastatic disease with a nonsquamous type *
- o Early-stage IB-IIIa nonsquamous type that has been removed surgically
- o In some situations among patients with squamous cell carcinoma

*Adenocarcinoma is the most common subtype to have biomarkers present.

Your healthcare provider may decide to retest at any time during your treatment if they feel it is necessary.

HOW IS BIOMARKER TESTING DONE?



A tissue sample from a tumor biopsy is sent to a lab for analysis.



One or two vials of blood are collected from a blood draw and sent to a lab for analysis of the DNA shed by the cancer into the bloodstream.

Your healthcare provider will determine if biomarker testing should be done with a tissue sample, liquid biopsy, or both.



WHEN WILL YOU GET THE RESULTS?

Your doctor or nurse will get the results in approximately two to three weeks. It is important to have these results before beginning treatment so your care plan is customized for your specific type of cancer.



Biomarker Testing in Non-Small Cell Lung Cancer

Discussion Tool

MY BIOMARKERS RESULTS:

MY TREATMENT:

NOTES:

References

Leighl, N.B., Page, R.D., Raymond, V.R., Daniel, D.B., Divers, S.G., Reckamp, K.L., . . . Papadimitrakopoulou, V.A. (2019). Clinical utility of comprehensive cell-free DNA analysis to identify genomic biomarkers in patients with newly diagnosed metastatic non-small cell lung cancer. *Clinical Cancer Research*, 25(15), 4691–4700. <https://doi.org/10.1158/1078-0432.CCR-19-0624>

National Comprehensive Cancer Network. (2021). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Non-small cell lung cancer [v.4.2021]. https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf

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