

Biomarker Testing in Metastatic NSCLC

Molecular biomarker testing allows for administration of targeted treatments, improves patient outcomes, and helps with the development of new targeted therapies. PD-L1 testing allows for selection of patients for first-line immunotherapy.



WHAT?

- ~60% of patients with adenocarcinoma of the lung harbor an actionable mutation
- Expanded mutational testing (ie, using next-generation sequencing, etc) should be considered in those with advanced lung cancer to aid in precision oncology treatment



WHY?

- Targeted therapies are available for many oncogenic driver mutations
- Patients with actionable mutations have improved outcomes when treated with targeted therapy
- Clinical trials are available for various other actionable mutations



HOW?

- Most biomarker testing is performed on tissue samples
- Liquid biopsies (blood) can often supplement tissue samples
- Discuss specific sample requirements with institutional pathologists



WHO?

- All patients with stage IV NSCLC:
- PD-L1
- All patients with non-squamous cell NSCLC & those with squamous cell NSCLC who are <50 y/o or with minimal/light tobacco history:
- At least: EGFR, ALK, BRAF, ROS1, RET, HER2, KrasG12c, MET

Biomarker testing should be incorporated in the workup of all patients with metastatic NSCLC.

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