

Clinical Process Gaps Result in Lung Cancer Patients Missing the Opportunity to Benefit from Personalized Medicine, New Study Shows

Published: October 31, 2022

Background

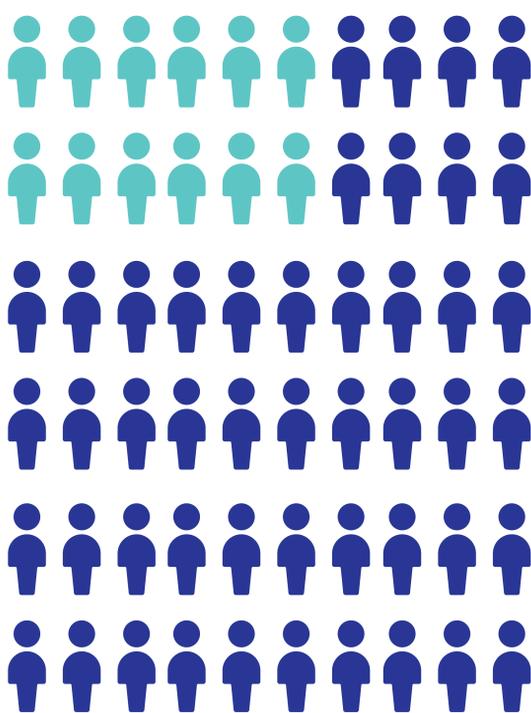
It is well recognized that many oncology patients who should receive personalized treatments do not. A new study published in JCO: Precision Oncology entitled "Impact of Clinical Practice Gaps on the Implementation of Personalized Medicine in Advanced Non-Small Cell Lung Cancer" examines the inconsistent usage of targeted therapies for patients with advanced non-small cell lung cancer (aNSCLC).

The study explores seven specific clinical practice steps in the patient diagnostic and treatment journey and quantifies the patient attrition at each step using de-identified Medicare claims and laboratory data from over 38,000 patients diagnosed with aNSCLC in 2019. The practice gaps assessed in the study include those related to testing access and availability, sample processing, test performance, test interpretation, and utilization of results.

Topline Findings: Despite a lengthy history of targeted treatment availability in aNSCLC, the study found that 644 of every 1,000 newly diagnosed aNSCLC patients (64.4%) did not receive a personalized treatment.

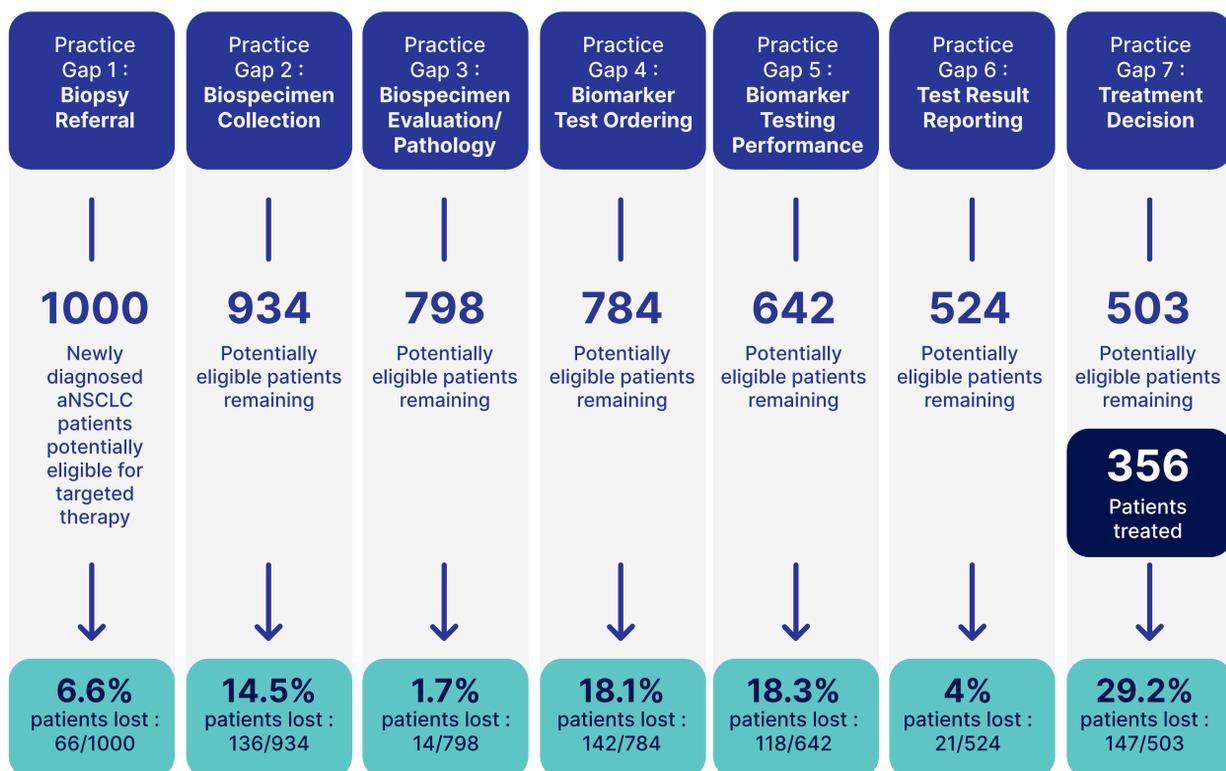
Among patients who are potentially eligible for targeted therapy, 49.7% are lost to factors associated with biomarker testing.

Among those who did receive results from a biomarker test, 29.2% of eligible patients were not prescribed the appropriate targeted therapy.



Step by Step Findings

The data was normalized to a patient population of 1,000 to easily demonstrate the number of eligible patients that may be lost to receiving targeted therapies due to each clinical practice gap.



Conclusion

- ✓ This study provides health system administrators, policymakers, and the pathology and oncology communities with needed data to target steps in the process where patients are losing the chance for targeted therapy
- ✓ The insights from this study can inform efforts to optimize biomarker testing in clinical practice and therefore help drive the delivery of personalized medicine to all cancer patients
- ✓ Potential areas for focus and strategies for reducing clinical practice gaps and improving personalized medicine implementation include:
 - Developing best practices to ensure tumor sampling, handling and testing is efficient
 - Improving practice integration and cross stakeholder communication including laboratories as a key function
 - Ensuring clear and timely reporting of test results
 - Improving clinician awareness of testing and interpretation of results
 - Addressing coverage, reimbursement and affordability challenges for tests and treatments underpinning personalized medicine