The need for rapid lung NGS

The hope

Retrospective study of 525 newly diagnosed stage IV non-small cell lung cancer (NSCLC) patients harboring actionable oncogenic drivers reveals that genomic profiling–directed therapy may improve patient outcomes [1].

The limited-access reality

48.7% of NSCLC patients are prescribed therapy in absence of a genomic profile [2]

24.7 days is the average turnaround time of NGS-based tumor biomarker results in the US [1]

26.8% of patients either do not have sufficient tissue for genomic profiling or receive an inconclusive result [2]

The main gaps in clinical testing [2]

Access to the appropriate testing

Sample inadequacy for testing and technical limitations of some tests

Long turnaround time (TAT) for results

The solution: rapid lung next-generation sequencing (NGS)

In-house

Tissue saving

Fast

Genomic profiling

Diagnosis and complete biomarker profile

Histopathology

Immunohistochemistry (IHC) biomarkers

Pathologist

Oncologist

Reduction of pretest QNS (quantity not sufficient) from 24.6% to 0%

Increase detection of actionable oncogenic drivers from 30.2% to 61.4%

24.6% to 0%

26.2%

By incorporating an amplicon-based NGS panel, a genomic hub laboratory achieved a significant drop in failure rates and increase in targetable-variant detection rate [4].

Fast NGS

With rapid lung NGS program and >95% sequencing success rate, we strive to provide our oncology colleagues with all of the clinically recommended biomarkers in the first-line setting available to them when making therapy decisions” [5].

With rapid lung NGS, we found an EGFR exon 20 insertion mutation in a patient progressing under third generation of TKIs in less than 2 working days, so they could be treated using new targeted treatment” [6].

Find out more about precision molecular profiling at oncomine.com

Reference
4. Speeding up lung cancer NGS so oncologists and NSCLC patients don't have to wait. The Pathologist. 6. Sadik et al. (2022) The Need for Rapid Lung NGS.

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