

New Lung Cancer Molecular Panel

Date: May 14th, 2024

Effective Date: June 20th, 2024

UR Medicine Labs will offer an RNA fusion panel designed to identify clinically actionable RNA fusions in lung cancer. This panel can detect known and unknown fusion isoforms through the combined use of RT-qPCR and mRNA 5' to 3' expression imbalance detection. The test can be ordered as a stand-alone test or, preferably, as a reflex test for lung cancers that show no oncogenic (Tier I) or likely oncogenic (Tier II) driver mutation by our solid tumor NGS panel (STMP).

Test Code: Ordering Pathologists should indicate on the internal requisition either STMP with reflex to fusion panel, or just the fusion panel. Laboratory staff will add test code **GNFS** as appropriate to SoftLab.

Targets: *ALK*, *ROS*, and *RET* fusions; *MET* exon 14 skipping alterations

Test Methodology: Biocartis Idylla GeneFusion Assay

Specimen Collection: Formalin-Fixed, paraffin-embedded tissue (FFPE) slides: 3 unstained slides with slices of 10uM, together with an H&E stained slide. The tumor cellularity should be indicated and the tumor area should be circled by the pathologist. The tumor cellularity should be more than 25% in the circled area. When ordering as a reflex from STMP, 12 unstained slides with an H&E should be collected for the two tests combined, or if appropriate, a microtube with FFPE curls and 2 unstained slides with a stained H&E.

The Idylla GeneFusion Assay was optimized using FFPE tissue from non-small cell lung cancer (NSCLC).

Turnaround Time: 3-5 Days

From: Zoltan Oltvai, M.D.
Director of the Molecular Diagnostic Laboratory
UR Medicine Labs
Phone: (585) 273-2229
Email: Zoltan.Oltvai@urmc.rochester.edu