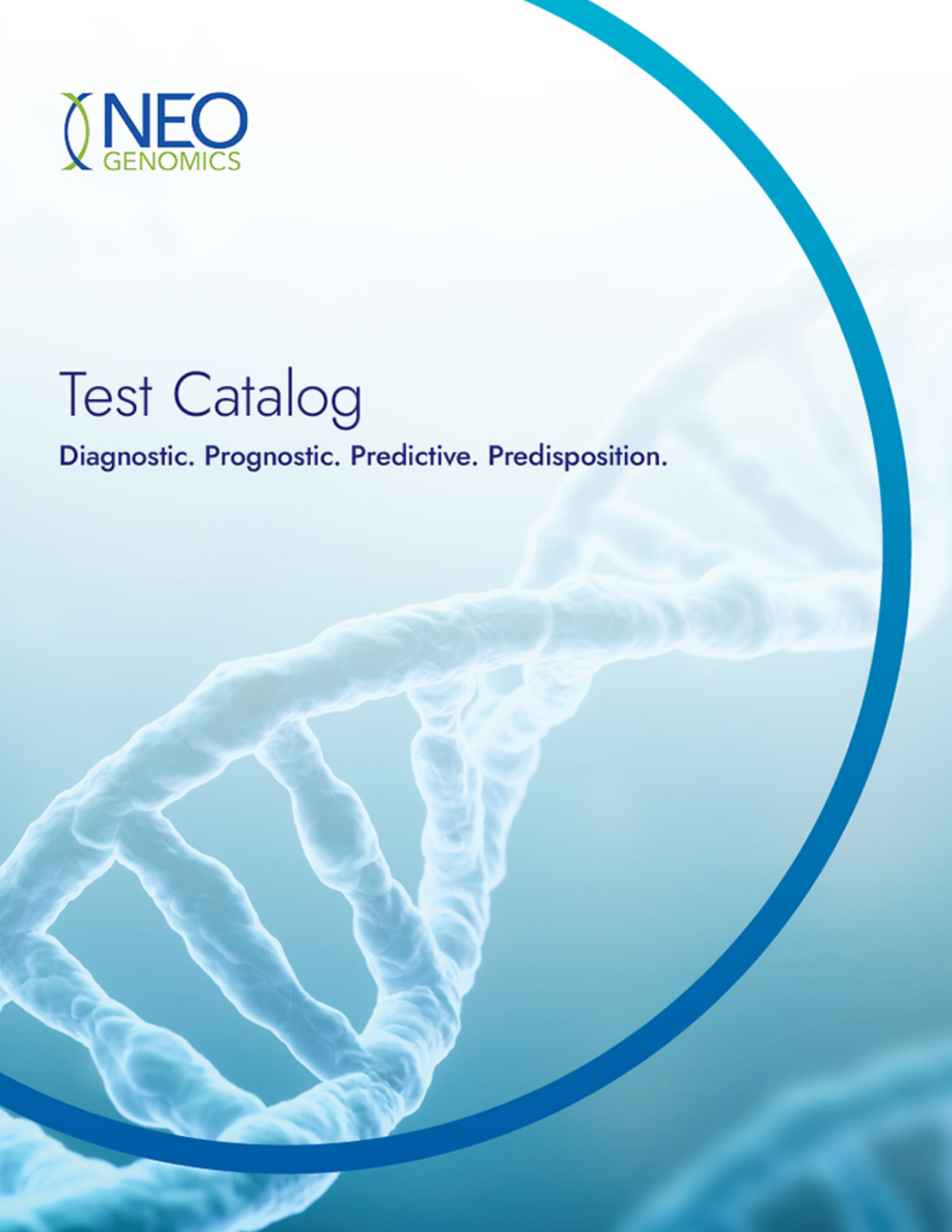
NEO GENOMICS

Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



Lung NGS Fusion Panel (Complete or Limited)

Alternative Name
Lung NGS Fusion Profile, Lung Complete NGS Fusion Panel, Lung Limited NGS Fusion Panel

Methodology
Molecular

Test Description
The Lung NGS Fusion Panel (Complete or Limited) is an RNA-based next-generation sequencing panel that detects translocations and fusions of the genes ALK, MET including MET Exon 14 skipping, NTRK1, NTRK2, NTRK3, NRG1, RET and ROS1 with known and novel fusion partners. Examples of some of the published fusions detectable in this test include EML4-ALK, KIF5B-ALK, NPM1-ALK, CD74-NTRK1, MPRIP-NTRK1, TPM3-NTRK1, TRIM24-NTRK2, PAN3-NTRK2, ETV6-NTRK3, CCD6-RET (aka RET-PTC1), KIF5B-RET, NCOA4-RET (aka RET-PTC3), CD74-ROS1, SLC34A2-ROS1, and TPM3-ROS1.

Lung Complete NGS Fusion Panel includes all genes listed above. Clients can opt out of ALK and ROS1 testing to receive the Lung Limited NGS Fusion Panel report.

This test may be used to select patients for the following FDA-approved therapies:

- ALK- ALECENSA® (alectinib), XALKORI® (crizotinib), ZYKADIA™ (ceritinib), ALUNBRIG® (brigatinib), LORBRENA® (lorlatinib)
- MET Exon 14- TABRECTA™ (capmatinib)
- NTRK- ROZLYTREK® (entrectinib), VITRAKVI® (larotrectinib)
- RET- GAVRETO™ (pralsetinib), RETEVMO™ (selpercatinib)
- ROS- XALKORI® (crizotinib), ROZLYTREK® (entrectinib)

Clinical Significance
Fusions of the ALK, NTRK1, NTRK2, NTRK3, RET and ROS1 kinase genes with various partner genes have been reported as oncogenic drivers in multiple cancer types including lung adenocarcinoma. Chimeric proteins resulting from the gene fusions may be overexpressed or constitutively activated and lead to progression of cancer. Patients whose tumors have such gene fusions may respond to various kinase inhibitors. In non-small cell lung carcinoma (NSCLC), these gene fusions are detected with the following approximate frequencies: ALK (4-6%), NTRK (1%), RET (1-2%), and ROS1 (1-2%).

Specimen Requirements
- **FFPE tissue:** Paraffin block is preferred. Alternatively, send 1 H&E slide plus 5-10 unstained slides cut at 5 or more microns. Please use positively-charged slides and 10% NBF fixative. Do not use zinc fixatives.

Storage & Transportation
Use cold pack for transport. Make sure cold pack is not in direct contact with specimen.

CPT Code(s)*
81449

Medicare MolDX CPT Code(s)*

81449

New York Approved

Yes

Level of Service

Global

Turnaround Time

21 days

*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.

NeoGenomics Laboratories is a specialized oncology reference laboratory providing the latest technologies, testing partnership opportunities, and interactive education to the oncology and pathology communities. We offer the complete spectrum of diagnostic services in molecular testing, FISH, cytogenetics, flow cytometry, and immunohistochemistry through our nation-wide network of CAP-accredited, CLIA-certified laboratories.

Committed to research as the means to improve patient care, we provide Pharma Services for pharmaceutical companies, in vitro diagnostic manufacturers, and academic scientist-clinicians. We promote joint publications with our client physicians. NeoGenomics welcomes your inquiries for collaborations. Please contact us for more information.

*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.

9490 NeoGenomics Way
Fort Myers, FL 33912
Phone: 239.768.0600/ Fax: 239.690.4237
neogenomics.com

Rev. 050624