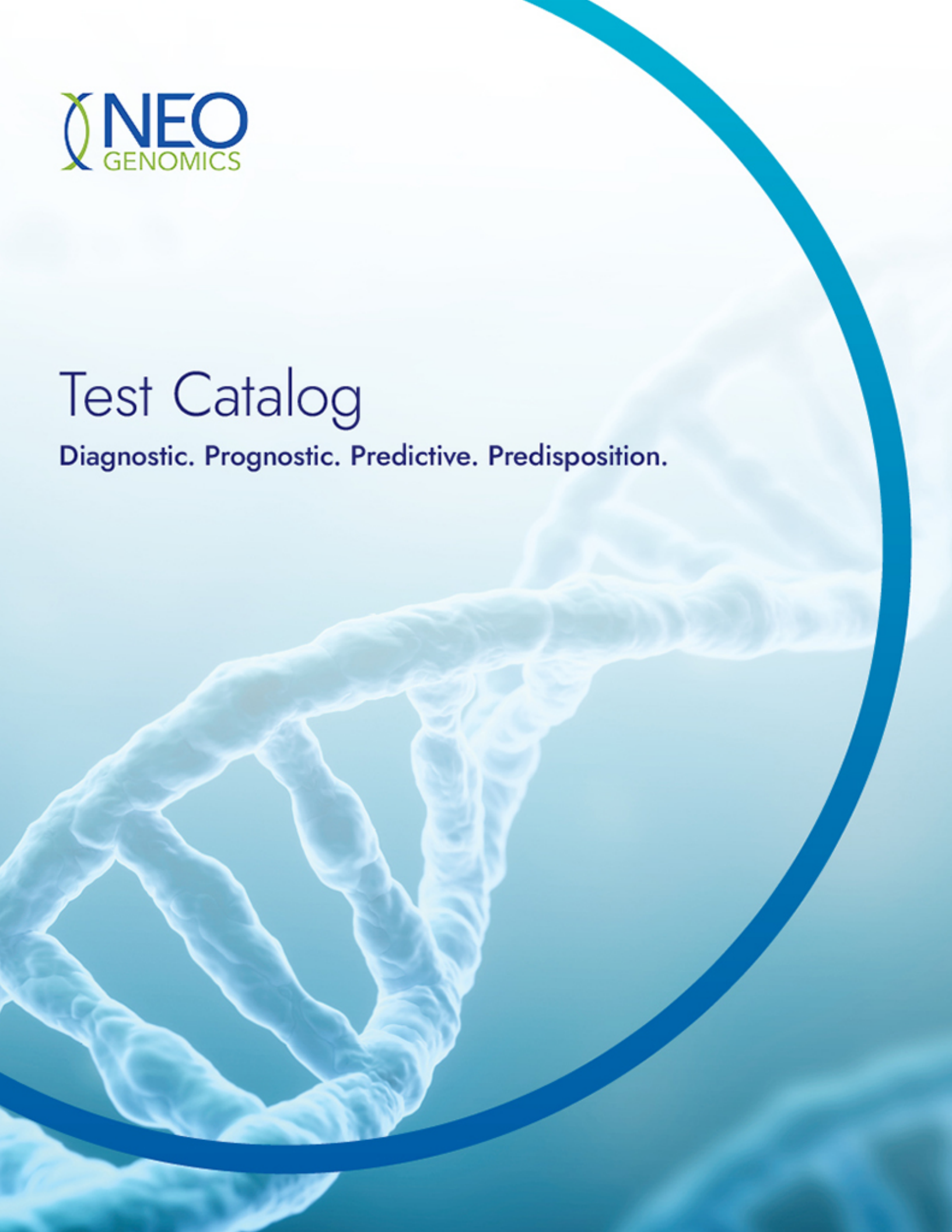
NEO GENOMICS

Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



EGFR Mutation Analysis by PCR

Alternative Name
EGFR, epidermal growth factor receptor

Methodology
Molecular

Test Description
EGFR Mutation Analysis Assay is based on PCR amplification and detection of target DNA using complementary primer pairs and oligonucleotide probes labeled with fluorescent dyes. This assay is designed to detect highly recurrent EGFR alterations in exon 18-21 (Exon 18 G719X; Exon 19 deletions; Exon 20 T790M, C797S, Exon20-Ins and S768I; Exon 21 L858R, L861Q); some less common EGFR mutations are not detectable in this test. For a full list of EGFR variants detectable in this assay, please contact NeoGenomics client services.

Clinical Significance
Epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein which can activate downstream RAS/RAF/MAPK pathway. Activating mutations in the EGFR gene have been identified in approximately 20% of non-small cell lung cancer (NSCLC). Most EGFR mutations occur in exons 18–21 and are predictive biomarkers for clinical response or resistance to certain EGFR tyrosine kinase inhibitors (TKIs). Identifying NSCLC patients with EGFR mutation is critical in determining patient eligibility for targeted TKI therapies.

Specimen Requirements
- **FFPE solid tumor 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.
- **Fine needle aspirate (FNA):** Requisition must note specimen is FNA. FFPE cell blocks are acceptable if pathologist attaches note verifying sample has >30% tumor or abnormal cells (required). Minimum 10^6 cells.

Storage & Transportation
Use cold pack for transporting block during summer to prevent block from melting. Slides can be packed at room temperature.

CPT Code(s)*
81235

New York Approved
Yes

Level of Service
Global

Turnaround Time

7 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.

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