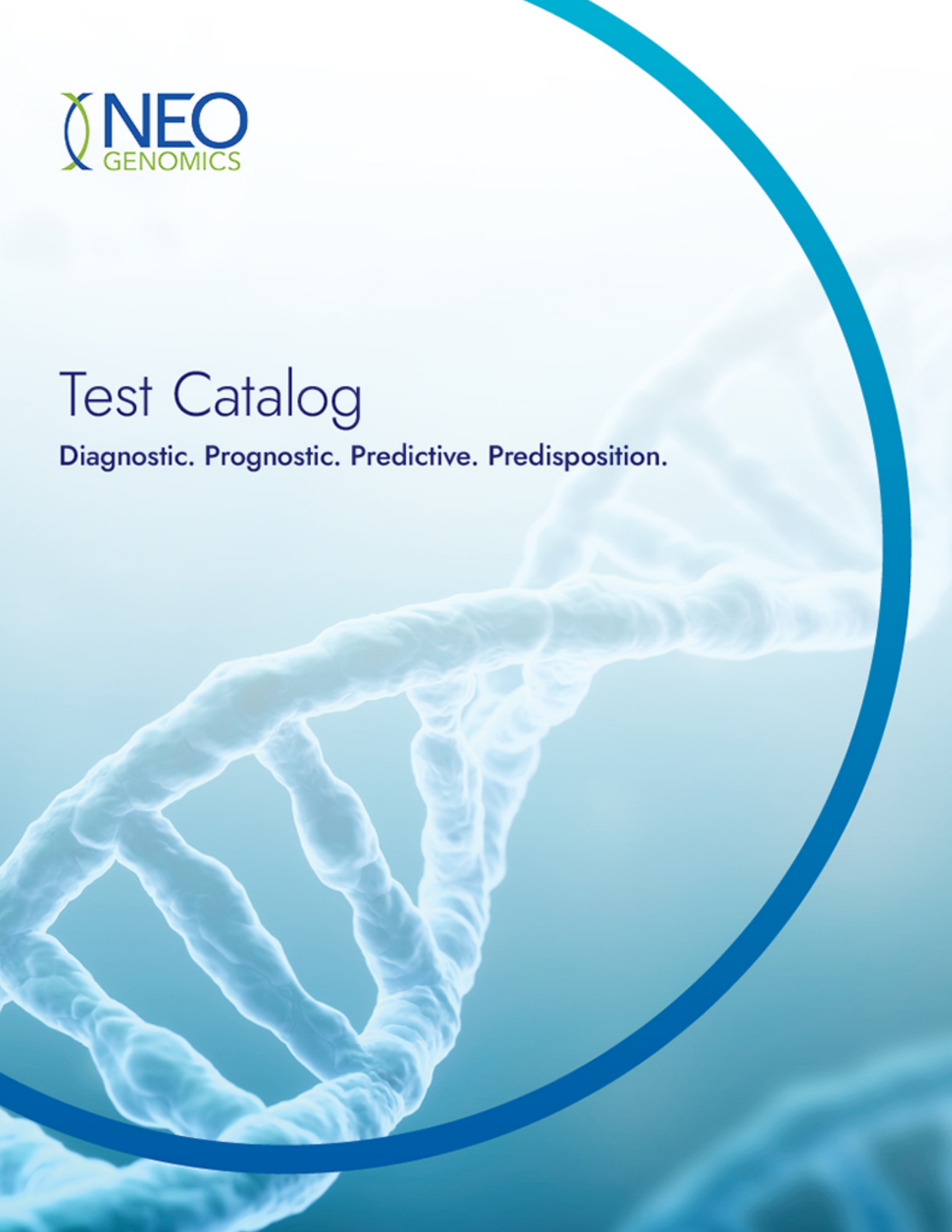
NEO GENOMICS

Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



Microsatellite Instability (MSI) by PCR

Alternative Name
Microsatellite Instability Analysis

Methodology
Molecular

Test Description
PCR and fragment analysis of paired normal and tumor tissue to determine microsatellite instability (MSI) at the standard five NCI-recommended loci. Positive results are reported as MSI-high (at least two markers are unstable) or MSI-low (one marker is unstable). Testing requires paired normal tissue or blood analysis and at least 20% tumor content in tumor samples submitted (after macro-dissection).

Clinical Significance
MSI analysis and/or mismatch repair (MMR) IHC is recommended for all new colorectal cancer diagnoses to detect patients at increased risk of carrying germline mutations associated with Lynch Syndrome (HNPCC). MSI is also detected in sporadic colorectal cancer and its presence may imply better prognosis. MSI and MMR testing also serve as companion diagnostic tests in a wide range of solid tumors for selection of certain immuno-oncology therapies.

Specimen Requirements
- **Note:** An additional patient sample from normal, non-tumor tissue is required for comparison testing in MSI Analysis. Please submit all specimens with one test requisition form.
- **Specimen requirements for normal tissue in order of preference are:**
    1. 5 mL peripheral blood in EDTA tube
       OR
    2. FFPE tissue slides or block containing only non-tumor tissue. Please label these as "normal tissue".
       OR
    3. In cases where no alternative tissue is available, we can attempt to isolate non-tumor tissue from the tumor specimen submitted. Note "Use tumor sample for normal tissue" on requisition. See requirements below.
- **Specimen requirements for tumor tissue: 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 transporting block, making sure cold pack is not in direct contact with specimen. Slides can be packed at room temperature.

CPT Code(s)*
81301x1

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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