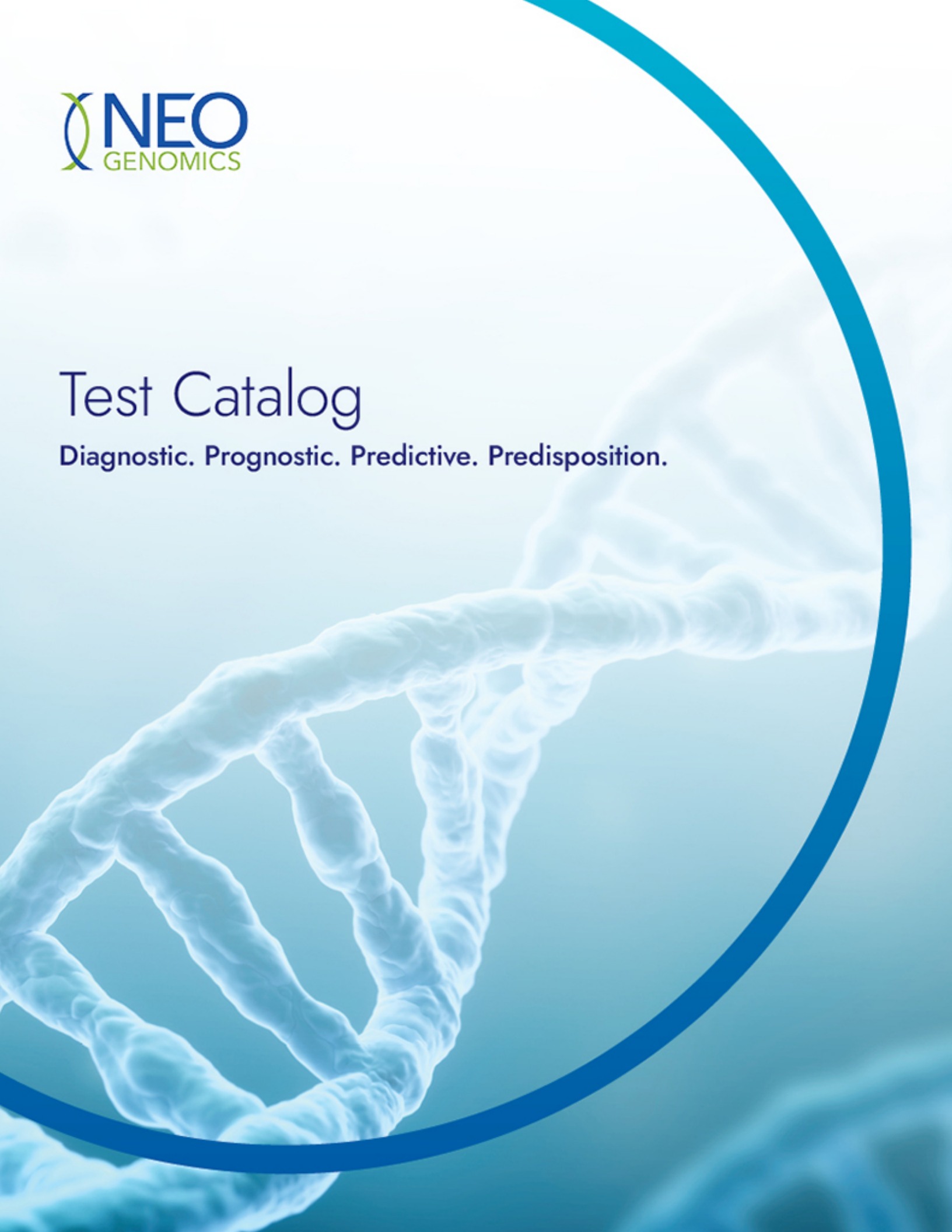
NEO GENOMICS

# Test Catalog

**Diagnostic. Prognostic. Predictive. Predisposition.**



# High-Grade B-Cell Lymphoma Reflex FISH Panel

## Methodology
FISH

## Test Description
**Probes:** MYC (8q24) | MYC/IgH/CEN8 t(8;14)

**Reflex Scheme:**

- Reflex to BCL2 (18q21) and BCL6 (3q27) if MYC/IgH/CEN8 t(8;14) is positive
  OR
- Reflex to BCL2 (18q21), BCL6 (3q27), IGK/MYC t(2;8), IGL/MYC t(8;22), and BCL6/MYC t(3;8) if MYC (8q24) is positive and MYC/IgH/CEN8 t(8;14) is negative

**Disease(s):** B-cell lymphoma, double-hit lymphoma, triple-hit lymphoma

Note: This test is available on a global basis. Tech-only clients may order probes individually.

## Clinical Significance
The High-Grade B-Cell Lymphoma Reflex Panel differentiates double-hit or triple-hit lymphomas (which have MYC rearrangements together with BCL2 and/or BCL6 rearrangements) from Burkitt lymphoma or diffuse large B-cell lymphoma. Double-hit and triple-hit lymphomas are difficult to classify morphologically without aid of cytogenetics/FISH or IHC, and are associated with an aggressive course. Testing is indicated when B-cell lymphoma patients experience transformation, relapse, or refractory disease. MYC/IgH/CEN8 will confirm heavy chain rearrangement when MYC is rearranged.

IGK/MYC t(2;8), IGL/MYC t(8;22) and BCL6/MYC t(3;8) studies are useful to further subclassify lymphomas that are positive for MYC gene rearrangements, but negative for the most common IGH/MYC translocation. In addition, when both MYC and BCL6 gene rearrangements are present, but no IGH/MYC translocation is identified, these studies may help to differentiate between the double-hit/triple-hit lymphomas (D/T-HL), which have a poor prognosis, and DLBCL with BCL6/IGH translocation, representing a subset of GC B-cell lymphomas distinct from conventional D/T-HL and with better prognosis (so-called "pseudo-double-hit lymphoma").

This reflex panel may be considered a cost-effective alternative to the High-Grade/Large B-Cell Lymphoma FISH Panel when clinical circumstances allow an additional few days for reflex testing if MYC is rearranged.

## Specimen Requirements
- **Bone Marrow Aspirate:** 1-2 mL sodium heparin tube. EDTA tube is acceptable.
- **Peripheral Blood:** 2-5 mL sodium heparin tube. EDTA tube is acceptable.
- **Fresh, Unfixed Tissue:** Tissue in RPMI.
- **Bone Marrow/ Peripheral Blood Smear or Fresh Tissue Touch Preparation Slides:** minimum *3 slides* labeled with specimen type.
  - NOTE: Technically 1 TP is required since MYC would initially be ordered and other probes only reflexed if MYC was positive
- **Fluids:** Equal parts RPMI to specimen volume
- **Fixed Cell Suspension:** A client fixed cell suspension may be submitted for testing as long as it is received in 3:1 Methanol:Glacial Acetic Acid.
- **Paraffin Block:** Paraffin block acceptable.

- **Cut Slides:** H&E slide (required) plus 4 unstained slides cut at 4 microns.
- **Note:** Please exclude biopsy needles, blades, and other foreign objects from transport tubes. These can compromise specimen viability and yield, and create hazards for employees.

## Storage & Transportation

Refrigerate specimen. Do not freeze. Use cold pack for transport, making sure cold pack is not in direct contact with specimen. For fresh samples: ship same day as drawn whenever possible; specimens <72 hours old preferred.

## CPT Code(s)*

88374x2 automated or 88377x2 manual without reflex; with reflex option 1, add 88374x2 automated or 88377x2 manual; with reflex option 2, add 88374x5 automated or 88377x5 manual

## New York Approved

Yes

## Level of Service

Global

## Turnaround Time

3-5 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.

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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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