High-Grade/Large B-Cell Lymphoma Panel (NY and non-NY)

Alternative Name
Large B-Cell Lymphoma

Methodology
FISH

Test Description
Probes: BCL6 (3q27) | MYC (8q24) | BCL2 (18q21) | Optional probe: MYC/IgH/CEN8 t(8;14)

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

For comprehensive prognostic information, these probes can be added on to the panel: BCL6/MYC t(3;8), IGK/MYC t(2;8), IGL/MYC t(8;22)

Clinical Significance
This 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 rearranges with an immunoglobulin partner in approximately 60% of MYC-rearranged DLBCL/HGBCL of which 75% are MYC/IgH fusion. Clients may choose to add MYC/IgH/CEN8 t(8:14) testing to their initial test order. MYC/IgH/CEN8 will confirm heavy chain rearrangement when MYC is rearranged. In addition, a small subset of lymphomas with MYC rearrangement (4%) may be missed when using the MYC breakapart probe alone, but some of these cases may be detected using the MYC/IgH fusion probe set (PMID: 30523057).

Clients may want to consider the High-Grade B-Cell Lymphoma Reflex FISH Panel as a cost-effective alternative.

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 *3-5 slides* labeled with specimen type.
  - **NOTE:** 3 slides needed for base 3 probe panel, 1 slide needed if optional 14;18 added, 1 slide needed if optional 8;14 added
- **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:** H&E slide (required) plus paraffin block. Circle H&E for tech-only.
- **Cut slides:** H&E slide (required) plus 6 unstained slides cut at 4 microns. Circle H&E for tech-only.
- **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 fresh specimens. 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)*
88374x3 automated. Add 88374x1 if the optional probe set is ordered. Codes may differ if manual analysis is performed

New York Approved
Yes

Level of Service
Technical, Global

Turnaround Time
3-5 days for both unfixed and FFPE specimens

*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.