Northwell Health Labs

TECHNICAL BULLETIN

☒NEW TEST ☒TEST CHANGE

NOTIFICATION DATE: March 19, 2021
EFFECTIVE DATE: March 22, 2021

FISH Oncology Myeloproliferative Disorder Panel Update (HLX FISH ONCOLOGY CASE)

Northwell Health Laboratories is introducing two new Fluorescence *in Situ* Hybridization (FISH) tests performed at North Shore University Hospital Cytogenetics Lab, as part of the Myeloproliferative Disorder (MPD) panel for the identification of the rearrangements involving the ***PDGFRB*** (Platelet Derived Growth Factor Receptor Beta) and ***FGFR1*** (Fibroblast Growth Factor Receptor 1) genes. Previously, these tests were performed at a reference lab.

1. **PDGFRB gene probe**
2. **FGFR1/CEP8 gene probe**

- The previous MPD panel included only the ***PDGFRA*** gene probe.
- These tests will aid in diagnosis and classification of specific myeloproliferative neoplasms (MPNs) with eosinophilia in conjunction with chromosome analysis.
- The intended purpose of adding ***PDGFRB*** (Platelet Derived Growth Factor Receptor Beta) and the ***FGFR1*** (Fibroblast Growth Factor Receptor 1) gene probes to the existing MPD FISH panel is to identify patients with myeloid and lymphoid neoplasms with rearrangements of these additional genes. Therefore, the expansion of this gene panel will allow for a more comprehensive analysis in the diagnosis, prognosis, and monitoring of eosinophilic leukemias.

Test Requirement/Parameters	
Specimen Requirements:	Peripheral Blood Bone Marrow Aspirate
Submission Container/Tube:	Peripheral Blood Green-top (sodium heparin) tube(s) Bone Marrow Green-top (sodium heparin) tube(s)
Specimen Volume/minimum volume:	Peripheral Blood 1-5 mL Bone Marrow 1-2 ml
Collection Instructions:	Send the specimen to the laboratory ASAP at room temperature 20-25°C. If there is a delay in transportation, store the sample in a refrigerator at 4°C / DO NOT FREEZE

Computer Interface Code: **PDM # 5160520**
Test Order: **HLX FISH ONCOLOGY CASE**

If you have any questions, please contact NSUH Cytogenetics Lab (516) 562-3898.