

TECHNICAL BULLETIN

NEW TEST TEST CHANGE

NOTIFICATION DATE: 05/09/2024

EFFECTIVE DATE: 05/13/2024

HLX FISH Oncology CASE (FISH Onco)

On the effective date, the Cytogenetics lab at NSUH (Northwell Health Labs) will expand the Multiple Myeloma (MM) fluorescence *in situ* hybridization (FISH) panel with two additional probes. The orderable for this test remains the same “HLX FISH Oncology CASE”. Expanding the MM FISH panel will aid in the improved risk stratification for patients with MM in conjunction with cytogenetic testing.

- **1p32(CDKN2C)/1q21(CKS1B) probe** to detect deletions of 1p and/or gains/amp of 1q
 - The probe will be used to identify deletions of 1p32 and/or gains/amplifications of 1q21. These are independent markers with a negative impact on progression-free survival and overall survival.
- **IGH::MAFB probe** to detect t(14;20)
 - t(14;20) is the rarest of the five most common translocations in MM that involves the *IGH* gene. It is found in about 1% of all MM cases and has a poor prognosis.

Test Requirement/Parameters	New	Previous
Methodology	Fluorescence <i>In Situ</i> Hybridization (FISH)	Fluorescence <i>In Situ</i> Hybridization (FISH)
Specimen Type	Bone Marrow Aspirate, Peripheral Blood	Bone Marrow Aspirate, Peripheral Blood
Submission Container/Tube	Green-top (sodium heparin) tube(s) <i>Clotted sample is not acceptable but an attempt will be made</i>	Green-top (sodium heparin) tube(s) <i>Clotted sample is not acceptable but an attempt will be made</i>
Specimen Volume/Minimum Volume	Peripheral Blood 5-10 mL Bone Marrow 5 mL preferred (Minimum 2 mL with sufficient spicules)	Peripheral Blood 5-10 mL Bone Marrow 5 mL preferred (Minimum 2 mL with sufficient spicules)
Specimen Stability	Send the specimen to NSUH Cytogenetics Laboratory ASAP at room temperature (20-25°C). If there is a delay in transportation, then store the sample in refrigerator at 4°C. DO NOT FREEZE SAMPLE	Send the specimen to NSUH Cytogenetics Laboratory ASAP at room temperature (20-25°C). If there is a delay in transportation, then store the sample in refrigerator at 4°C. DO NOT FREEZE SAMPLE
Computer Interface Code	PDM #5160520	PDM #5160520
Test Order	HLX FISH Oncology CASE	HLX FISH Oncology CASE

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