

DATE:	5 September 2024
TO:	Hematology and Hematopathology Providers, Provincial
FROM:	Molecular Pathology, Alberta Precision Laboratories
RE:	NPM1 Quantitative Test Send Out – New Procedure

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Key Message

- As of Aug 30th 2024, There is a new build in EPIC that will simplify the ordering and send out of NPM1 quantitative testing for the purposes of minimal residual disease (MRD) monitoring for patients with acute myeloid leukemia (AML). This test will now be sent to Mayo Medical Laboratories for quantitation of type A, B, or D NPM1 mutations in blood or bone marrow.

Background

- NPM1 mutations occur in a subset of AML patients and may be used to track MRD for the purposes of treatment planning. This is done by quantitative testing for NPM1 in peripheral blood or bone marrow. Patients with type A, B, or D NPM1 mutations are eligible for such testing. Mayo Medical Laboratories performs this test on RNA extracted from EDTA tubes. APL is also collecting prospective samples for future validation purposes and will need a second sample (EDTA for South sector and PaxGene for North sector) to save for future validation.

How this will impact you

- The orderable for NPM1 quantitation is now available in EPIC and the test directory specifies which tubes are needed. As per the test directory the following apply:

Bone marrow specimens North sector	-One EDTA tube of 4 ml to send to Mayo -One EDTA tube of 1 ml for Molecular Pathology North -One PAXGene tube of 2 ml or less for Molecular Pathology North
Bone marrow specimens South sector	-Two EDTA tubes of 4 ml, one for send out and one for Molecular Pathology South.
Peripheral blood specimens North sector	-Two EDTA tubes of 5 ml each for send out to Mayo, -Two EDTA tubes of at least 1 ml (one for CBC and one for Molecular Pathology North) -One PAXGene tube of at least 2.5 ml for Molecular Pathology North
Peripheral blood specimens South sector	-Two EDTA tubes of 5 ml each for send out to Mayo -One EDTA tube of at least 4 ml for Molecular Pathology South

Action Required

- Please follow the instructions in the test directory for collection and send out of NPM1 quantitative analysis in blood or bone marrow. Specimens should be collected Monday-Wednesday to ensure receipt at Mayo within the 5 day window required. Specimens should be received within 24 hours of collection.



Effective August 30, 2024

Questions/Concerns

- Dr. Adrian Box, Molecular Pathology Provincial Lead (Adrian.Box@albertaprecisionlabs.ca)
- Dr. Cheryl Mather, Medical Leab, Molecular Pathology North (Cheryl.Mather@albertaprecisionlabs.ca)

Approved by

- Adrian Box, Medical/Scientific Director, Molecular Pathology Program
- Mark Douesnard, Operations Director, Molecular Pathology Program
- Dr. Carolyn O'Hara, Chief Medical Laboratory Officer (Interim), Alberta Precision Laboratories

Effective September 1, 2023, APL has become the sole provider of all public lab services in Alberta. As a result, community lab services formally provided by DynaLIFE Medical Labs will become the responsibility of Alberta Precision Labs (APL). This change impacts all zones.