

DATE:	27 May 2024
TO:	All Zones
FROM:	Molecular Pathology Laboratory, South, FMC
RE:	Thyroid Sample Molecular Pathology Test Ordering Updates

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Key Message

- The Molecular Pathology South Sector FMC Laboratory has updated the EPIC builds for ordering molecular testing on thyroid samples. Presently there is only one option (THYROID CARCINOMA MUTATION ANALYSIS) used for both thyroid nodule mutation analysis on fine-needle aspirate samples and thyroid carcinoma mutation analysis on tumor samples. This single orderable with dual workflows leads to logistical challenges in the Molecular Pathology Laboratory. Therefore, 2 independent EPIC orderables have been built:
 - **THYROID NODULE MUTATION ANALYSIS, FINE-NEEDLE ASPIRATE [LAB4858]** – This orderable is to be used for diagnostic / prognostic biomarker testing to assess risk of malignancy for indeterminate thyroid fine-needle aspiration (FNA) cytology specimens (Bethesda III AUS/FLUS, Bethesda IV FN/SFN). This includes DNA and RNA testing on the ThyroSPEC MassArray panel.
 - **THYROID CARCINOMA MUTATION ANALYSIS, TUMOR [LAB2538]** – This orderable is to be used for thyroid carcinoma predictive biomarker testing. This includes DNA testing on the ThyroSPEC DNA panel, and reflexive testing of BRAF/HRAS/KRAS/NRAS negative cases on the Kinase Fusion Panel.

How this will impact you

- Ordering molecular testing on thyroid samples will now have two options, and the choice will depend on whether the sample is a thyroid carcinoma for predictive biomarker testing, or an indeterminate thyroid fine-needle aspirate requiring biomarker testing to assess the risk of malignancy.

Action Required

- Refer to the test directory for details on these 2 different testing algorithms. When ordering molecular testing on thyroid samples, select the appropriate order to ensure the indicated testing is performed.
 - [Thyroid Nodule Mutation Analysis, Fine-Needle Aspirate](#)
 - [Thyroid Carcinoma Mutation Analysis, Tumor](#)

Effective **2024-05-27**

Questions/Concerns

- Dr. Adrian Box, Provincial Medical/Scientific Director, Molecular Pathology Program, Adrian.box@albertaprecisionlabs.ca
- Dr. Erik Nohr, Scientific Lead, Alberta Molecular Pathology South, erik.nohr@albertaprecisionlabs.ca

Approved by

- Dr. Adrian Box, Provincial Medical/Scientific Director, Molecular Pathology Program, Adrian.box@albertaprecisionlabs.ca

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.