



**Date:** August 24, 2020  
**To:** Endocrinology, Endocrine Surgery, and Laboratory Services Personnel  
**From:** Molecular Pathology Laboratory South  
**Re:** ThyroSPEC Assay Availability for Bethesda III/IV Thyroid Cytology Specimens

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**Key Message:**

- ThyroSPEC™ test using MassArray is available starting July 31, 2020 and will be performed at the Molecular Pathology Laboratory South at the Foothills Medical Center.
- Acceptable specimens include direct slide smears, FFPE prepared cell blocks and residual Cytolyt™ specimen.
- This test can be used for malignancy risk stratification of thyroid fine needle aspiration (FNA) cytology for samples categorized as Bethesda III and IV (AUS/FLUS and FN/SN).
- Molecular risk stratification post-test, utilized in conjunction with imaging and clinical findings, will assist clinicians in triaging patients with cytologically “indeterminate nodules” for appropriate treatment modality.

**Why this is important:**

- All clinicians involved in the care of patients with thyroid nodules/tumors need to understand the significance of molecular test results and how to integrate these results into management algorithms for their patients.

**Action Required:**

- APL cytopathologists should familiarize themselves with the ThyroSPEC™ test request process and appropriate testing utilization for residual liquid-based FNA cytology samples.
- Testing can be performed on all thyroid nodules with Bethesda III diagnoses as a reflex test.
- Testing of Bethesda IV lesions is available at cytopathologist’s request.
- Testing is available upon request for Alberta patients outside the Calgary Zone and for air-dried specimens. Please contact the Molecular Pathology Lab South for details of specimen delivery and testing.

**Inquiries and feedback may be directed to:**

- For questions regarding testing ordering and performance contact:
  - Molecular Pathology Lab South, Alberta Precision Laboratories, 403-220-4240
- For questions regarding the clinical use, utility, or management recommendations contact:
  - Dr. Ralf Paschke, Chair Provincial Endocrine Tumour Team, 403-955-8248
- For additional information on test interpretation and recommendations, please refer to the following websites:
  - <https://www.departmentofmedicine.com/endo-thyroid-nodules/>
  - <https://www.albertahealthservices.ca/assets/info/hp/cancer/if-hp-cancer-guide-molecular-fna-report.pdf>



**This bulletin has been reviewed and approved by:**

- Dr. Adrian Box, Medical Lead, Molecular Pathology Lab South
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- Dr. Carolyn O'Hara, Chief Medical Laboratory Officer (Interim), Alberta Precision Laboratories.