

DATE:	6 July 2026
TO:	All Zones
FROM:	Molecular Genetics Laboratories (MGL), North & South, Genetics and Genomics, APL
RE:	Updates to Cancer and Endocrine Gene Panel Testing

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Key Message

- The cancer and endocrine gene panels are being updated based on current scientific evidence. This change applies to samples analyzed in the laboratory after July 20, 2026.
- Changes are being made to the following gene panels:

Gene Panel	Genes Added
Breast/Ovarian/Prostate Cancer Panel	<i>HOXB13</i>
Endocrine Neoplasia Panel	<i>AP2S1 (codon 15 only), GCM2, GNA11, PTH, TRPV6</i>
Familial Acute Myeloid Leukemia Panel	<i>ANKRD26, DDX41, DKC1, ETV6, MBD4, RTEL1, SAMD9, SAMD9L, SRP72, TERC, TERT, TINF2</i>
Fanconi Anemia Panel	<i>BRCA1, MAD2L2, RAD51, RFWD3, UBE2T, XRCC2</i>
Gastrointestinal/Polypsis Panel	<i>AXIN2, CTNNA, GALNT12, GREM1, MBD4, MSH3, NTHL1, RNF43</i>
Gastrointestinal Stromal Tumor Panel	<i>PDGFRA</i>
Neurofibromatosis Type 1	<i>SPRED1</i>
Overgrowth Panel	<i>DNMT3A</i>
Paraganglioma/ Pheochromocytoma Predisposition Panel	<i>DLST, EGLN1, EPAS1, KIF1B, MDH2, SLC25A11, SUCLG2</i>
Pediatric Cancer Panel	<i>ELP1, GPR161, KIF1B, REST, TRIM28, TRIP13</i>
Schwannomatosis Panel	<i>LZTR1</i>
Skin Cancer Panel	<i>MBD4, MITF, POT1</i>
Xeroderma pigmentosum Panel	<i>POLH</i>

- No changes were made to the Hereditary Multiple Osteochondromatosis Panel, Lynch Syndrome Cancer Panel, Pancreatic Cancer Panel, Renal Cancer Panel and the Tuberous Sclerosis Panel.



- Single Gene Analysis is now available for *CBL*, *DGCR8*, *EGFR*, *ELOC*, *GALNT12*, *MERTK*, *MLH3*, *RPS20*, *SMARCA4*, and *SMARCE1*.

How this will impact you

- The addition of genes with limited, moderate or strong evidence will slightly improve the detection rates.
- Retesting of patients will only be approved for patients with a high suspicion of a genetic cancer or endocrine diagnosis (i.e. onset at a young age or strong family history). This requires prior approval from the lab. Please contact the MGL Genetic Counsellors for prior approval.

Action Required

- Refer to the test directory for a current list of genes on each panel: [APL Test Directory](#)
- If repeat testing is indicated and the original sample is less than two years old, a new blood sample is NOT required. Please submit a paper copy of the [Cancer and Endocrine Next Generation Sequencing Requisition](#) to the appropriate testing lab (MGL North or South) with the following:
 - Test order
 - A statement that testing was previously performed prior to July 20, 2026 and updated testing is required.
 - Reason for updated testing

Effective July 20, 2026

Questions/Concerns

- G&G North (Edmonton) MGL Genetic Counsellors at 780-407-1015
- G&G South (Calgary) MGL Genetic Counsellors at 403-955-3097

Approved by

- Dr. Dennis Bulman, Medical/Scientific Director, Genetics & Genomics, APL
- Dr. Carolyn O'Hara, Chief Medical Laboratory Officer, APL