

Leaders in Laboratory Medicine

Laboratory Bulletin

DATE:	18 February 2025
TO:	All Zones
FROM:	Molecular Genetics Laboratory, North Sector, Genetics and Genomics, APL
RE:	Updated to Familial Hypercholesterolemia Gene Panel Testing

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- The familial hypercholesterolemia (FH) gene panel has been updated based on current scientific evidence. This change applies to samples analyzed in the laboratory after March 3, 2025.
- The following genes will be added to the FH gene pane: APOE, LIPA, ABCG5, and ABCG8

How this will impact you

- The addition of these 4 genes will slightly improve the detection rate. The *APOE4* allele is not associated with FH and will not be reported. The *APOE2* allele will only be reported when homozygous as heterozygotes for the *APOE2* allele are not at increased risk for FH.
- Retesting of patients will only be approved for patients with a high suspicion of FH (i.e. onset at a young age and strong family history). This requires prior approval from the lab. Please contact the North MGL Genetic Counsellors for prior approval.

Action Required

• Refer to the test directory for a current list of genes on the FH gene panel: <u>Alberta Precision</u> Laboratories | Lab Services

Effective March 3, 2025

Questions/Concerns

G&G North (Edmonton) MGL Genetic Counsellors at 780-407-1015

Approved by

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