ALBERTA PRECISION LABORATORIES

Leaders in Laboratory Medicine

DATE:	22 January 2024
TO:	All Zones
FROM:	Molecular Genetics Laboratory (MGL) North (Edmonton)
RE:	Discontinuation of Apolipoprotein E Genotype Testing for Cardiovascular Risk

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

• Apolipoprotein E Genotype testing for type III hyperlipoproteinemia is no longer available. DNA sequencing for Apolipoprotein E (APOE) is included on MGL North's Inherited Lipid Disorders panel.

Background

• Hyperlipoproteinemias are genetically heterogeneous, meaning that the condition can be caused by a pathogenic variant(s) in any one of a number of genes. Therefore, gene panel testing that includes a number of dyslipidemia genes is preferred over single gene testing.

How this will impact you

• APOE testing will only be available via the Inherited Lipid Disorder Panel.

Action Required

- Refer to the test directory for current information on the Inherited Lipid Disorders panel <u>Alberta</u> <u>Precision Laboratories | Lab Services (albertahealthservices.ca)</u>
- Clinical Genetics and Endocrinology can order testing for patients with dyslipidemia meeting one of the following criteria:
 - Adults with triglycerides persistently > 10
 - Children with triglycerides persistently > 6
 - Pancreatitis with hypertriglyceridemia regardless of specific lipid levels
 - Patients with clinical features highly suggestive of an inherited lipid disorder (i.e., xanthomas, xanthelasmas, or corneal arcus)
- Presymptomatic testing, for patients with a positive family history, is restricted to Clinical Genetics.

APOE testing for dementia/Alzheimer's is not available. Testing for this purpose has limited clinical utility and poor predictive value.

Effective

• December 15, 2023

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

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.