

DATE:	2022 October 31
TO:	All Zones
FROM:	Genetics and Genomics
RE:	Cardiac Specific Variant Testing

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Effective November 1, 2022, cardiac specific variant testing for at-risk relatives can be performed at the molecular genetics lab that tested the proband. This testing approach will help ensure consistent variant interpretation guidelines are applied to family members.
- Testing for at-risk relatives must be performed at the G&G lab if proband testing was performed in-house. This applies to specific variants identified in the proband on the following Cardiac Panels:
 - Brugada syndrome
 - Catecholaminergic polymorphic ventricular tachycardia
 - Long QT syndrome
 - Pan arrhythmia
 - Arrhythmogenic right ventricular dysplasia/cardiomyopathy
 - Dilated cardiomyopathy
 - Hypertrophic cardiomyopathy
 - Pan cardiomyopathy
 - Comprehensive cardiac
 - Familial or inherited hypercholesterolemia
- If proband testing was performed at Blueprint Genetics, GeneDx, PreventionGenetics, or Invitae, the specific variant testing for at-risk relatives may be performed at that referral lab.
- If proband testing was performed at another laboratory, please contact the GRC to discuss prior to ordering specific variant testing.
- This exception only applies to variants identified in the genes listed under the “Cardiac Gene Panel, Specific Variant” test (LAB4148). Refer to the APL Test Directory for the full list of genes.

Action Required

The ordering provider can select the appropriate testing lab based on which laboratory performed testing for the proband. Note, if testing is ordered at G&G, testing will proceed in-house regardless of where the proband was tested.

If the provider is on Connect Care:

To order testing, place a Cardiac Gene Panel, Specific Variant (LAB4148) order.

To order testing at an external lab, place a Genetic Resource Center Send Out (LAB10047) order.

If the provider is not on Connect Care:

To order testing use the Molecular Genetics Laboratory Cardiac, Connective Tissue and Vascular NGS Requisition (<https://www.albertahealthservices.ca/frm-21778.pdf>)

To order testing at an external lab, use the Genetic Resource Centre Requisition (<https://www.albertahealthservices.ca/frm-21887.pdf>)

A copy of the proband’s report must be provided to the laboratory for testing to proceed.



Effective November 01, 2022

Questions/Concerns

- Molecular Genetics Laboratory, North
 - 780-407-1015 (Genetic Counsellors)
- Genetic Resource Centre
 - 403-955-5400

Approved by

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