



CARDIOMYOPATHY AND ARRHYTHMIA Lab Requisition

Ship to:
Genetics Diagnostics Laboratory
 Room 3403
 401 Smyth Road, Rm w3403 Ottawa, ON, K1H 8L1
 Tel: (613) 738-3230 Fax: (613) 738-4814
www.cheo.on.ca/GDL

Collection Date: _____
 Collection Centre: _____
 CHEO Pedigree Number: _____

Patient Name:

 Last First Initial

Health Card Number: _____

DOB: (dd/mm/yyyy): _____

Address: _____

Telephone: _____

Sex:

Sex assigned at birth: Male Female

ALL SECTIONS MUST BE COMPLETED

Sample Information

- Expedited testing required, reason: _____
 Blood 2x6mL EDTA Blood 2x3 ml EDTA (child) Blood 3mL EDTA (infant ≤1 year) Cord Blood* 3 mL DNA*, Source: _____
 *Maternal sample (with separate requisition for MCC) is also required for cord blood and prenatal samples.

HealthCare Provider Requesting Test (testing will be accepted from the following specialties: genetics, cardiology, neonatology)

Name: _____	COPY TO: Name: _____
Registration # _____	Registration #: _____
Address _____	Address: _____
Telephone _____	Telephone: _____
Fax: _____	Fax: _____

Test Requested (see next page for list of genes included in each panel)

Familial Variant Testing

- Gene: _____ Variant c. _____
 Original copy of report attached Family member tested at CHEO, name/DOB: _____ relationship to proband: _____
 A separate test may be performed to confirm reported family relationships of received samples and may reveal misattributed parentage.

Cardiomyopathy (CM) (select most applicable indication to proceed with testing)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Adult CM Panel
<input type="checkbox"/> Pediatric CM Panel
Confirmed or suspected diagnosis of:
<input type="checkbox"/> Dilated CM (age:____) <input type="checkbox"/> Restrictive CM (age:____)
<input type="checkbox"/> Arrhythmogenic CM (age:____) <input type="checkbox"/> Noncompaction CM (age:____)
<input type="checkbox"/> Not affected <input type="checkbox"/> Other, specify: _____ | <input type="checkbox"/> Adult Hypertrophic Cardiomyopathy Panel (HCM)
<input type="checkbox"/> Pediatric HCM Panel
Confirmed or suspected diagnosis of:
<input type="checkbox"/> Asymmetric HCM (age:____) <input type="checkbox"/> Concentric HCM (age:____)
<input type="checkbox"/> Apical HCM (age:____) <input type="checkbox"/> HCM, limited to basal septum (age:____)
<input type="checkbox"/> Not affected <input type="checkbox"/> Other, specify: _____ |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Arrhythmia

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Arrhythmia Panel
<input type="checkbox"/> Arrhythmia without structural heart disease
Confirmed or suspected diagnosis of:
<input type="checkbox"/> Cardiac conduction disease (age:____)
<input type="checkbox"/> Short QT syndrome (age:____)
<input type="checkbox"/> Not affected <input type="checkbox"/> Other, specify: _____ | <input type="checkbox"/> Long QT Syndrome Panel
<input type="checkbox"/> Confirmed or suspected diagnosis of Long QT Syndrome
<input type="checkbox"/> Catecholaminergic Polymorphic Ventricular Tachycardia Panel
<input type="checkbox"/> Confirmed or suspected diagnosis of CPVT
<input type="checkbox"/> Brugada single gene (SCN5A)
<input type="checkbox"/> Confirmed or suspected diagnosis of Brugada syndrome |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Combined CM and Arrhythmia

- Adult CM and Arrhythmia Panel**
 Pediatric CM and Arrhythmia Panel
 Diagnosis of CM + personal and/or F/H of arrhythmia
 Diagnosis of arrhythmia + personal and/or F/H of CM

Other

- Maternal Cell Contamination (MCC) Studies** **DNA Storage (DNA will be stored for 2 years)** **Single gene testing:** _____

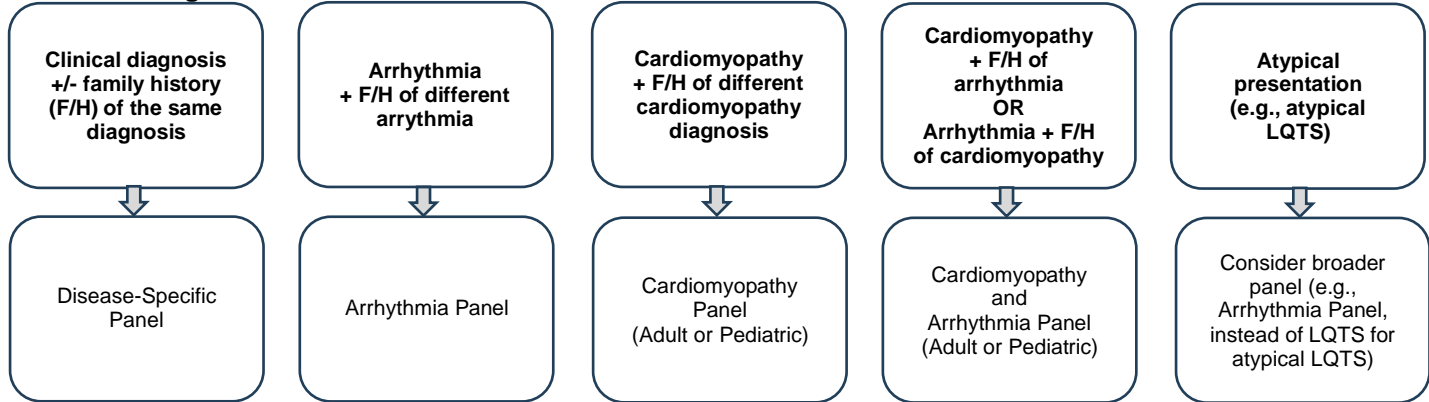
Cardiovascular features

- Hypertension on medication Pacemaker Obesity Implantable cardioverter defibrillator Diabetes Chemotherapy-induced CM
 Post-partum CM Other, specify: _____

Family history in 1st or 2nd degree relative

- Same phenotype as the patient Sudden cardiac death <45y No Unknown
 Other CM or arrhythmia, specify: _____

Genetic Testing Utilization Considerations



F/H- family history. LQTS- long QT syndrome. Individuals 18 years old and under should be offered the pediatric panel. Individuals diagnosed (typically up to age 25 years old) should be eligible for the pediatric panel if the ordering clinical deems appropriate.

Gene content for the Cardiomyopathy and Arrhythmia Genetic Testing Panels

Panel	Number of Genes	Genes Included
Cardiomyopathy Panels		
Adult HCM	45	ABCC9, ACTC1, ACTN2, ALPK3, BRAF, CACNA1C, CSRP3, DES, FHL1, FHOD3, FLNC, GLA, HRAS, JPH2, KLHL24, KRAS, LAMP2, LZTR1, MAP2K1, MAP2K2, MRAS, MT-TI, MYBPC3, MYH7, MYL2, MYL3, MYO6, NRAS, PLN, PPP1CB, PRKAG2, PTPN11, RAF1, RIT1, RRAS2, SHOC2, SOS1, SOS2, TNNC1, TNNI3, TNNT2, TPM1, TRIM63, TTR, VCL
Adult Cardiomyopathy	81	Adult HCM panel + ACADVL, BAG3, CAV3, CTNNA3, DMD, DSC2, DSG2, DSP, DYSF, EMD, FKR, FKTN, GAA, GATA4, HCN4, JUP, LDB3, LMNA, MIB1, NEXN, NKX2-5, NRAP, OBSCN, PKP2, PLEKHM2, PRDM16, RBM20, RRAGD, RYR2, SCN5A, TFAZZIN, TBX5, TMEM43, TMEM70, TNNI3K, TTN
Pediatric Cardiomyopathy	100	Adult Cardiomyopathy + Pediatric HCM panels + ALMS1, CPT2, HADHA, HADHB, PPA2, SGCD, SLC25A20, TBX20, TCAP
Pediatric HCM	56	Adult HCM panel + AGL, CBL, GAA, MAP3K8, MTO1, NF1, RRAS, SLC22A5, SLC25A4, SPRED2, TAB2
Arrhythmia Panels		
Long QT Syndrome	12	CACNA1C, CALM1, CALM2, CALM3, KCNE1, KCNE2, KCNH2, KCNJ2, KCNQ1, SCN5A, TECRL, TRDN
Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)	8	CALM1, CALM2, CALM3, CASQ2, KCNJ2, RYR2, TECRL, TRDN
Brugada Syndrome	1	SCN5A
Arrhythmia	40	Brugada Syndrome + CPVT, and LQTS panels, + CTNNA3, DES, DSC2, DSG2, DSP, EMD, FLNC, GLA, HCN4, JUP, LAMP2, LMNA, NKX2-5, PKP2, PLN, PPA2, PRKAG2, RBM20, SLC22A5, SLC4A3, TBX5, TMEM43, TNNI3K, TRPM4, TTN, TTR
Combined Cardiomyopathy and Arrhythmia Panels		
Adult Cardiomyopathy and Arrhythmia	96	Adult Cardiomyopathy + Arrhythmia panels
Pediatric Cardiomyopathy and Arrhythmia	113	Pediatric Cardiomyopathy + Arrhythmia panels