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)

☐ **Adult CM Panel**
☐ **Pediatric CM Panel**
Confirmed or suspected diagnosis of:
☐ Dilated CM (age:____) ☐ Restrictive CM (age:____)
☐ Arrhythmogenic CM (age:__) ☐ Noncompaction CM (age:____)
☐ Not affected ☐ Other, specify:

☐ **Adult Hypertrophic Cardiomyopathy Panel (HCM)**
☐ **Pediatric HCM Panel**
Confirmed or suspected diagnosis of:
☐ Asymmetric HCM (age:____) ☐ Concentric HCM (age:____)
☐ Apical HCM (age:____) ☐ HCM, limited to basal septum (age:____)
☐ Not affected ☐ Other, specify:

Arrhythmia

Arrhythmia Panel
☐ Arrhythmia without structural heart disease
Confirmed or suspected diagnosis of:
☐ Cardiac conduction disease (age:___)
☐ Short QT syndrome (age:___)
☐ Not affected ☐ Other, specify:_____

Long QT Syndrome Panel
☐ Confirmed or suspected diagnosis of Long QT Syndrome

Catecholaminergic Polymorphic Ventricular Tachycardia Panel
☐ Confirmed or suspected diagnosis of CPVT

Brugada single gene (SCN5A)
☐ 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:**_____

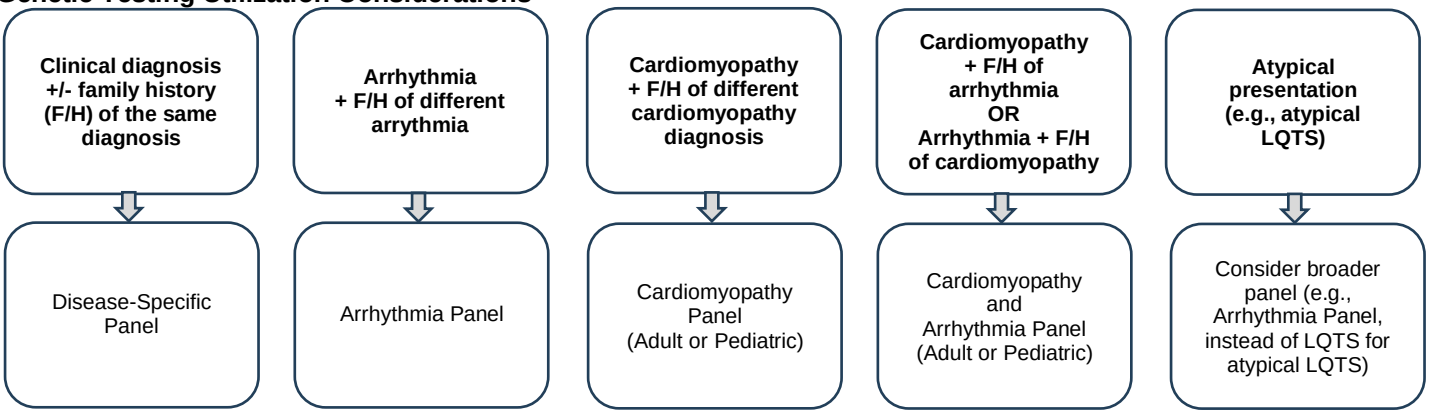
Cardiovascular features

☐ 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, FKRP, FKTN, GAA, GATA4, HCN4, JUP, LDB3, LMNA, MIB1, NEXN, NKX2-5, NRAP, OBSCN, PKP2, PLEKHM2, PRDM16, RBM20, RRAGD, RYR2, SCN5A, TAFAZZIN, 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