



CardioGxOne™

INHERITED CARDIOVASCULAR DISEASES and SUDDEN CARDIAC DEATH

**[213
Genes]**

CardioGxOne™ is a genetic test to detect mutations associated with inherited cardiovascular diseases and sudden cardiac death to provide an exhaustive study of genes.

- Panel includes all genes currently known to be associated with the development of inherited cardiovascular diseases that can present as sudden death or other major adverse events.
- Clinical interpretation integrates genetic and clinical data from a proprietary knowledgebase curated by expert cardiologists.
- Results may aid definitive diagnosis when clinical information is incomplete or the diagnosis is unclear.
- Genetic study can complement and complete familial evaluations.
- Reflex testing to Admera's PGxCardio™ test is available to help provide therapeutic treatment recommendations.

Differential diagnosis and risk assessment of over thirty disease categories, including:

Cardiomyopathies

- Hypertrophic Cardiomyopathy (HCM)
- Dilated Cardiomyopathy (DCM)
- Arrhythmogenic Cardiomyopathy (ARVC/D)
- Left Ventricular Noncompaction (LVNC)
- Restrictive Cardiomyopathy (RCM)

Arrhythmias and Channelopathies

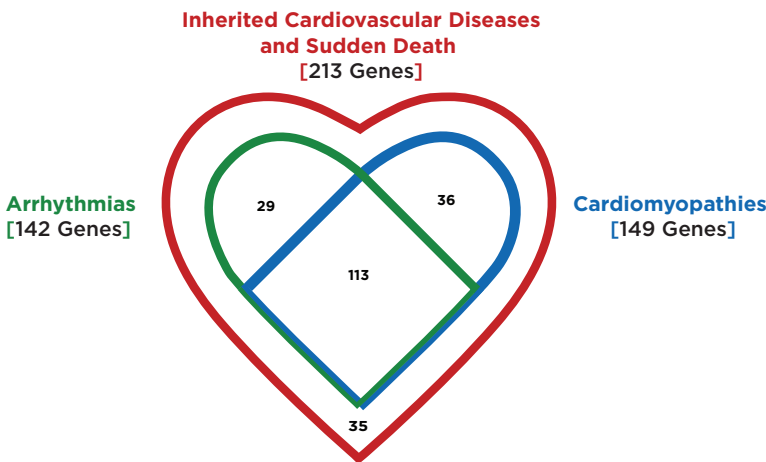
- Long/Short QT Syndrome
- Brugada/J-Wave Syndrome
- Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)

Congenital Heart Diseases

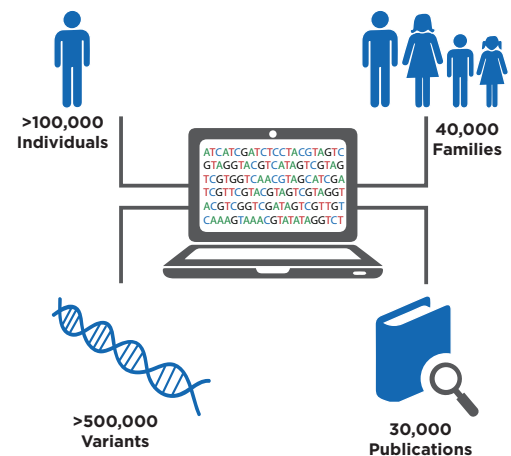
Aortic Vascular Diseases

- Marfan Syndrome
- Loeys-Dietz Syndrome
- Ehlers-Danlos Syndrome
- Thoracic Aortic Aneurysms/Dissections (TAAD)
- Arterial Tortuosity Syndrome

Number of Genes Covered by Global Panels



Proprietary Clinical Knowledgebase



Detects gene mutations associated with inherited cardiovascular diseases and sudden cardiac death to provide an exhaustive study of genes. Results may aid definitive diagnosis when clinical information is incomplete or the diagnosis is unclear.

Global Panels: Inherited Cardiovascular Diseases and Sudden Death • Cardiomyopathies • Arrhythmias • Ventricular Arrhythmia and Sudden Death without Structural Heart Disease

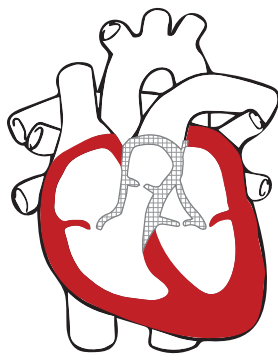
Genes

ACTA2, ACTC1, ACVRL1, APOB, BAG3, BMPR2, BRAF, CACNA1C, CALM1, CALM2, CASQ2, COL3A1, DES, DMD, DSC2, DSG2, DSP, EMD, ENG, FBN1, FLNC, GLA, JUP, KCNE1, KCNE2, KCNH2, KCNJ2, KCNQ1, KRAS, LAMP2, LDLR, LMNA, MYBPC3, MYH7, MYL2, MYL3, NKX2-5, PKP2, PLN, PRKAG2, PTPN11, RAF1, RBM20, RYR2, SCN10A, SCN5A, SOS1, TAZ, TGFB1, TGFB2, TMEM43, TNNC1, TNNI3, TNNT2, TPM1, TTN, TTR, AARS2, ABCC9, ACAD9, ACADM, ACADVL, ACTA1, ACTN2, ADAMTSL4, AGK, AGL, AGPAT2, AKAP9, ALMS1, ANK2, ANKRD1, APOA5, APOC3, ATPAF2, BMPR1B, BSCL2, CACNA1D, CACNA2D1, CACNB2, CALR3, CAPN3, CAV1, CAV3, CBL, CBS, CETP, COL1A1, COL1A2, COL5A1, COL5A2, COQ2, COX15, COX6B1, CRELD1, CRYAB, CSRP3, CTNNA3, DLD, DNAJC19, DOLK, DTNA, ELN, EYA4, FAH, FBN2, FHL1, FHL2, FHOD3, FKRP, FKTN, FLNA, FOXD4, GAA, GATA4, GATA6, GATAD1, GDF2, GFM1, GJA1, GJA5, GLB1, GNPTAB, GPD1L, GUSB, HCN4, HFE, HRAS, JAG1, JPH2, KCNA5, KCND3, KCNE1L, KCNE3, KCNJ5, KCNJ8, KCNK3, LAMA2, LAMA4, LDB3, LIAS, LRP6, MAP2K1, MAP2K2, MIB1, MLYCD, MRPL3, MRPS22, MTO1, MURC, MYH11, MYH6, MYLK, MYOT, MYOZ2, MYPN, NEBL, NEXN, NOTCH1, NOTCH3, NPPA, NRAS, PCSK9, PDHA1, PHKA1, PITX2, PLOD1, PMM2, PRDM16, PRKG1, PSEN1, PSEN2, RANGRF, SCN1B, SCN2B, SCN3B, SCN4B, SGCA, SGCB, SGCD, SHOC2, SKI, SLC22A5, SLC25A4, SLC2A10, SLMAP, SMAD1, SMAD3, SMAD4, SMAD9, SNTA1, SPRED1, SURF1, TBX1, TBX20, TBX5, TCAP, TGFB2, TGFB3, TMEM70, TMPO, TRDN, TRIM63, TRPM4, TSFM, TNXRD2, VCL, ANK3*, CTF1*, KLF10*, MYLK2*, OBSL1*, PDLIM3*

Priority genes (clear association with disease) | Secondary genes (lower evidence of association) | *Candidate genes (research focused)

Disease Specific Panels:

Cardiomyopathies [149 Genes]

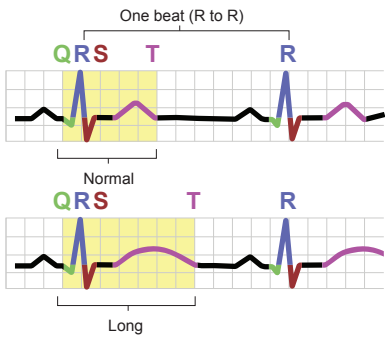


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|--|---------------|
| Hypertrophic Cardiomyopathy (HCM) | [16/90 Genes] |
| Dilated Cardiomyopathy (DCM) | [81 Genes] |
| Arrhythmogenic Cardiomyopathy (ARVC/D) | [17 Genes] |
| Left Ventricular Noncompaction (LVNC) | [36 Genes] |
| Restrictive Cardiomyopathy (RCM) | [20 Genes] |
| Noonan, Leopard, Costello, RASopathy | [12 Genes] |

Arrhythmias and Channelopathies [141 Genes]

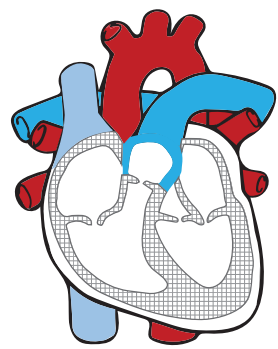
ELECTROCARDIOGRAM

One beat (R to R)



| | |
|------------------------|------------|
| Long/Short QT Syndrome | [24 Genes] |
| Brugada/Jwave Syndrome | [23 Genes] |
| Atrial Fibrillation | [38 Genes] |

Aortic Vascular Diseases [30 Genes]



Aortic Vascular Diseases [30 Genes]

- Marfan, Loeys-Dietz
- Vascular Ehlers-Danlos
- Thoracic Aortic Aneurysms/Dissections (TAAD)