

# Cardiogenetics Testing

REFERENCE GUIDE



#### Why Choose Ambry

More than 1 in 200 people have an inherited cardiovascular condition. Ambry's mission is to provide the most advanced genetic testing information available to help you identity those at-risk and determine the best treatment options. If we know a patient has a disease-causing genetic change, not only does it mean better disease management, it also indicates that we can test others in the family and provide them with potentially life-saving information.

### Diseases and Testing Options

#### **ARRHYTHMIAS**

Catecholaminergic Polymorphic Ventricular Tachycardia (CPVTNext)

Long QT Syndrome, Short QT Syndrome, Brugada Syndrome (LongQTNext, RhythmNext)

Arrhythmias (RhythmNext, CardioNext)

#### CARDIOMYOPATHIES

Hypertrophic Cardiomyopathy (HCMNext)

Dilated Cardiomyopathy (DCMNext)

Arrhythmogenic Right Ventricular Cardiomyopathy (ARVCNext)

Cardiomyopathies (CMNext, CardioNext)

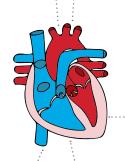
# FAMILIAL HYPERCHOLESTEROLEMIA AND LIPID DISORDERS

Familial Hypercholesterolemia (FHNext)

Sitosterolemia (Sitosterolemia Panel)

Comprehensive Lipid Menu (CustomNext-Cardio)

Familial Chylomicronemia Syndrome (FCSNext)



#### OTHER CARDIO CONDITIONS

Transthyretin Amyloidosis (TTR)

Noonan Syndrome (NoonanNext)

Hereditary Hemorrhagic Telangiectasia (HHTNext)

# THORACIC AORTIC ANEURYSMS AND DISSECTIONS

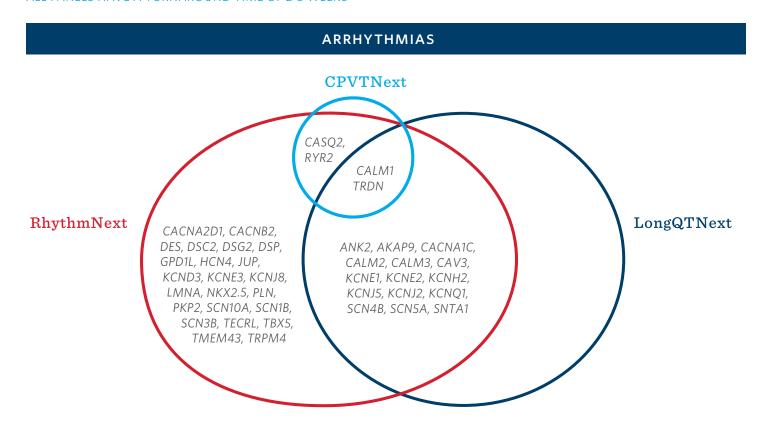
Thoracic Aneurysms and Dissections, aortopathies (TAADNext)

Marfan Syndrome (TAADNext)

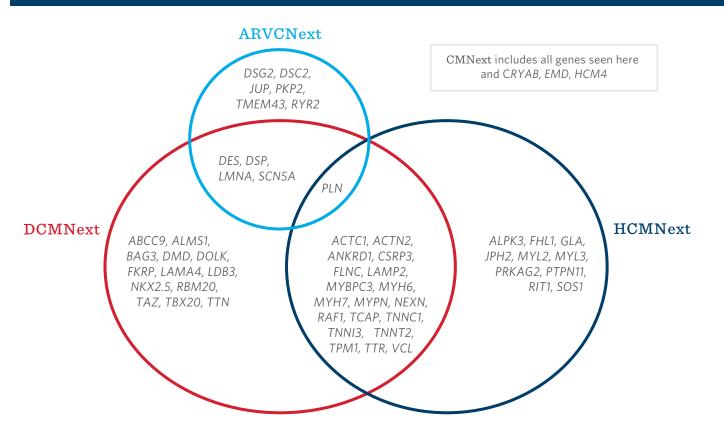
Ehlers-Danlos Syndrome (TAADNext)

## Targeted Panels Gene Comparison

ALL PANELS HAVE A TURNAROUND TIME OF 2-3 WEEKS



### **CARDIOMYOPATHIES**



# Comprehensive, Targeted and Lipid Panel Gene Lists

ALL PANELS HAVE A TURNAROUND TIME OF 2-3 WEEKS

CardioNext 92 genes		TAADNext 35 genes	NoonanNext 18 genes	FHNext 4 genes + SNP
ACTC1	LAMP2	BGN	CBL	LDLR
ACTN2	LDB3	CBS	HRAS	LDLRAP1
AKAP9	LMNA	CHST14	KRAS	PCSK9
ALMS1	MYBPC3	COL1A1	LZTR1	SLCO1B1 (c.521T>C)*
ALPK3	MYH6	COL1A2	MAP2K1	SECOIDI (C.SZII-C)
ANK2	MYH7	COL3A1	MAP2K2	T C C L
ANKRD1	MYL2	COL5A1	NF1	FCSNext
BAG3	MYL3	COL5A2	NRAS	5 genes
CACNA1C	MYOZ2	EFEMP2	PPP1CB	APOA5
CACNA2D1	MYPN	FBN1	PTPN11	
CACNB2	NEXN	FBN2	RAF1	APOC2
CALM1	NKX2.5	FKBP14	RASA1	GPIHBP1
CALM2	PKP2	FLNA	RIT1	LMF1
CALM3	PLN	FOXE3	SHOC2	LPL
CASQ2	PRKAG2	LOX	SOS1	
CAV3	PTPN11	MAT2A	SOS2	Sitosterolemia
CRYAB	RAF1	MED12	SPRED1	
CSRP3	RBM20	MFAP5		2 genes
DES	RIT1	MYH11		ABCG5
DMD	RYR2	MYLK		ABCG8
DOLK	SCN10A	NOTCH1		
DSC2	SCN1B	PLOD1		G . 35 . G !!
DSG2	SCN2B	PRDM5		CustomNext-Cardio
DSP	SCN3B	PRKG1		Up to 18
EMD	SCN4B	SKI		additional lipid genes
EYA4	SCN5A	SLC2A10		ABCA1
FHL1	SNTA1	SMAD3		ABCG5
FKRP	SOS1	SMAD4		ABCG8
FKTN	TAZ	TGFB2		
FLNC	TBX20	TGFB3		APOA1
GATAD1	TBX5	TGFBR1		APOA5
GLA	TCAP	TGFBR2		APOB
GPD1L	TECRL	TNXB		APOC2
HCN4	TGFB3	ZNF469		APOC3
JPH2	TMEM43			APOE
JUP	TNNC1			CYP27A1
KCND3	TNNI3			GPIHBP1
KCNE1	TNNT2			LCAT
KCNE2	TPM1			LDLR
KCNE3	TRDN			LDLRAP1
KCNH2	TRPM4			LIPA
KCNJ2	TTN			
KCNJ5	TTR			LMF1
KCNJ8	TXNRD2			LPL
KCNQ1	VCL			PCSK9



CustomNext-Cardio allows you to choose your own combination of up to 167 genes.

#### Over 1 Million Tests Completed

#### MOVING SCIENCE FORWARD



#### Free Family Member Testing

Free testing for ALL family members is now available within 90 days of the original report if the proband was tested at Ambry. Family testing is done via specific site analysis for pathogenic or likely pathogenic variants. (Excludes SNP array and applies to single gene, panel or exome testing.)

#### Purposeful Confirmatory Testing

Many labs validate their tests based on certain limited studies. That's why we led the largest study of its kind (20,000 cases) guiding us to utilize confirmatory testing when we see specific well-defined thresholds. Our mission is to get it right the first time.

#### Flexible Sample Options

Ambry accepts blood, saliva and other sample types to perform genetic testing.

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#### Sample for Life

We periodically review variants and let you know when there is updated information, such as a reclassification. This is part of our commitment to finding answers.

## About Ambry



Just as no two fingerprints are alike, the way disease presents itself in every individual is different. Since 1999, our mission has always been about understanding disease better, so treatments and cures can be found faster. Every sample that arrives in our lab is viewed as a person with a life and a story that is unique to only them. By providing advanced confirmation genetic testing for inherited and non-inherited diseases, we can help you make more informed and responsible medical management decisions with your patients.

Visit ambrygen.com for more information.