

RISK ASSESSMENT and DIAGNOSIS for EARLY ATHEROSCLEROSIS/DYSLIPIDEMIAS

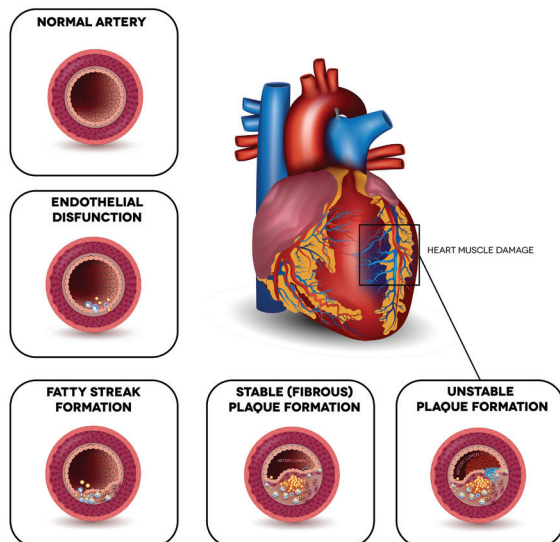
84 Genes

AtheroGxOne™ is a genetic test to detect mutations responsible for monogenic diseases of early atherosclerosis.

- Panel genes affect plasma levels of lipids (total cholesterol, LDL, HDL, triglycerides) and blood sugar.
- Targeted diseases have a high impact on cardiovascular risk since they appear at an early age and indicate poor prognosis without aggressive medical intervention.
- The probability of identifying the responsible mutation in patients who meet clinical criteria of familial hypercholesterolemia ranges from 60% to 80%.^{1,2,3}

Panel Designed For Patients Who Have Or May Have:

- Premature coronary artery disease (men < 50 years old; women < 60 years old)
- Suspected Familial Hypercholesterolemia
- Suspected Familial Hypertriglyceridemia
- Mixed Hyperlipidemias
- Abnormally high LDL levels or low HDL
- Maturity-Onset Diabetes of the Young (MODY)



Atherosclerosis is defined as the buildup of plaque within arteries that can lead to heart attack, stroke, or even death. Approximately, 5% of cardiac arrests in individuals younger than 60 years old can be attributed to genetic mutations included in this panel; this number rises up to 20% in individuals younger than 45 years old.^{4,5}

AtheroGxOne™ Gene List

ABCA1	CIDEA	KLF11	PDX1
ABCB1	COQ2	LCAT	PLIN1
ABCG1	CPT2	LDLR	PLTP
ABCG5	CYP2D6	LDLRAP1	PNPLA2
ABCG8	CYP3A4	LEP	PPARA
AGPAT2	CYP3A5	LIPA	PPARG
AKT2	EIF2AK3	LIPC	PTF1A
AMPD1	FOXP3	LMF1	PTRF
ANGPTL3	GATA6	LMNA	PYGM
APOA1	GCK	LPA	RFX6
APOA5	GLIS3	LPL	RYR1
APOB	GPD1	LRP6	SAR1B
APOC2	GPIHBP1	MEF2A	SCARB1
APOC3	HNF1A	MTTP	SLC22A8
APOE	HNF1B	MYLIP	SLC25A40
BLK	HNF4A	NEUROD1	SLC2A2
BSCL2	IER3IP1	NEUROG3	SLCO1B1
CAV1	INS	NPC1L1	TBC1D4
CEL	INSIG2	PAX4	TRIB1
CETP	INSR	PCDH15	WFS1
CH25H	KCNJ11	PCSK9	ZMPSTE24

¹ Youngblom et al. Familial Hypercholesterolemia. 2014 Jan 2. In: Pagon RA, Adam MP, Ardinger HH, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2016

² Goldberg AC, et al. National Lipid Association Expert Panel on Familial Hypercholesterolemia. J Clin Lipidol. 2011 Jun;5(3 Suppl):S9-17.

³ National Collaborating Centre for Primary Care (UK). Identification and Management of Familial Hypercholesterolaemia (FH) [Internet]. London: Royal College of General Practitioners (UK); 2008 Aug.

⁴ Hopkins PN, et al. Prevalence, genetics, diagnosis and screening recommendations from the National Lipid Association Expert Panel on Familial Hypercholesterolemia. J Clin Lipidol. 2016;5(3):S9-S17.

⁵ National Collaborating Centre for Primary Care (UK). Identification and Management of Familial Hypercholesterolaemia (FH) [Internet]. London: Royal College of General Practitioners (UK); 2008 Aug. (NICE Clinical Guidelines, No. 71.)