

Cardiac DNA Insight®



Cardiac DNA Insight® can help to identify a patient's propensity for an increased risk of certain heart-related health conditions. This report also examines eight classes of drugs commonly used for cardiovascular patients: anti-platelets, anti-coagulants, statins, stimulants, beta-blockers, ACE inhibitors, calcium channel blockers and hormone therapies. Cardiac DNA Insight® may be used to enhance the information provided in standard blood tests that evaluate risk for cardiovascular disease.

Cardiac DNA Insight® provides information that allows the physician to:

- Identify potential patient specific cardiac-related health risks
- Develop personalized medical management plans to help address results
- Suggest lifestyle and dietary interventions aimed at combating cardiac-related health conditions
- Optimize medication and dosing



Health Conditions	ATRIAL FIBRILLATION	INCREASED RISK
	<p>Gene Tested - PITX2</p> <p>Clinical Implications:</p> <ul style="list-style-type: none"> • Patient has average genetic risk of atrial fibrillation. • This test outcome was determined using genetic laboratory results in conjunction with the patient's self-reported ethnicity. <p>Recommendation:</p> <ul style="list-style-type: none"> • General preventative measures, such as exercise, smoking cessation and limiting alcohol consumption, could be encouraged. 	<p>ABOVE AVERAGE RISK</p> <p>AVERAGE RISK</p>

Interested in learning more about Pathway Pharmacogenomic testing? Visit www.pathway.com today!

Cardiac DNA Insight®

Cardiac DNA Insight® analyzes a patient's unique genetic markers, which influence a broad range of heart-related conditions, including triglycerides, HDL and LDL cholesterol levels, and risks for hypertension and myocardial infarction. This saliva-or-blood based test is supported by scientifically validated genetic testing technologies using clinically relevant markers and assays.

Pathway Genomics provides you and your patients access to a genetic counselor at no charge to review your patients' individual results.

Below are the traits included in a patient's personalized report.

Pharmacogenetics

Phenotype tested:	Genetic markers:
→ Beta-blockers	GRK5
→ Beta-blockers, LVEF response	ADRB1
→ Caffeine metabolism	CYP1A2
→ Clopidogrel metabolism (Plavix)	CYP2C19
→ Estrogen supplementation (risk of venous thrombosis)	FII (prothrombin) and FV Leiden
→ Metoprolol metabolism	CYP2D6
→ Perindopril (ACE inhibitor-therapeutic benefit)	AGTR1, BDKRB1
→ Simvastatin-induced myopathy	SLCO1B1
→ Verapamil and QTc interval	NOS1AP
→ Verapamil vs. atenolol (benefit of)	CACNA1C
→ Warfarin	CYP2C9 & VKORC1

Metabolic Health Factors

Phenotype tested:	Genetic markers:
→ ApoE and cardiovascular disease	ApoE
→ Risk for decreased folate	MTHFR
→ Risk for decreased HDL cholesterol	14 markers tested
→ Risk for elevated LDL cholesterol	APOB and 9 additional markers
→ Risk for elevated triglycerides	APOB and 10 additional markers

Health Conditions

Phenotype tested:	Genetic markers:
→ Atrial fibrillation	PITX2
→ Coronary artery disease	HNF1A and 11 additional markers
→ Hypertension	BCAT1 and PPARGC1A
→ Myocardial infarction (depending on ethnicity)	11 or more markers tested
→ Peripheral arterial disease	CHRNA3
→ Sickle cell anemia	HBB
→ Venous thrombosis	FII (prothrombin), FV Leiden, MTHFR

