

Cardiac DNA



Cardiac DNA can help identify a patient's propensity for increased risk of certain heart-related health conditions. This report also examines eight classes of drugs that affect the cardiovascular system: 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 lipid tests that evaluate risk for cardiovascular disease.

Cardiac DNA provides information that allows the physician to:

- Better monitor a patient's specific health condition.
- Prescribe a more optimal medication and dosage for a patient.
- Suggest early lifestyle and diet interventions to help combat or prevent certain health conditions.

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CLOPIDOGREL METABOLISM

ULTRARAPID METABOLIZER

EXTENSIVE METABOLIZER

INTERMEDIATE METABOLIZER

POOR METABOLIZER

Gene Tested - CYP2C19

Clinical Implications:

- Patient has increased risk of stent thrombosis following percutaneous coronary intervention compared to most patients treated with the same dose of clopidogrel.
- This patient's genotype is consistent with low or no CYP2C19 enzyme activity, and, thus, the patient is likely to have low plasma concentrations of the active metabolite of clopidogrel.
- CYP2C19 genotype and metabolizer status may also affect responses to other drugs.

Recommendation:

- Alternative therapies, such as prasugrel, should be considered.



For more information about Luminus Diagnostics testing platform
Contact us @ www.luminusdiagnostics.com 855-518-5542

Cardiac DNA

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

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



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