

Comprehensive Cardiovascular Profile 2.0

sample type: **BLOOD**

The **Comprehensive Cardiovascular Profile 2.0** incorporates the latest breakthroughs in cardiovascular disease research to provide advanced, early warning of cardiovascular disease risk.

The **Comprehensive Cardiovascular Profile 2.0** is a thorough evaluation featuring an advanced lipid profile with fractionation, independent risk markers (including homocysteine and hs-C-reactive protein), relative risk indices, and Metabolic Syndrome alerts. All of these advanced markers play a critical role in the biochemical environment underlying cardiovascular health. The insight they provide allows the clinician to accurately address abnormalities relating to heart and vascular diseases.

Preventing heart disease requires much more than simply screening for high cholesterol in the blood. Consider the following:

- Researchers indicate that “although this approach has been useful, it fails to identify almost one-half of the 1.3 million individuals who developed MI (myocardial infarction) in the U.S. each year who have either normal or only moderately increased serum cholesterol concentrations.”
- An estimated 80% of patients who develop coronary artery disease have cholesterol levels (as measured by standard lipid profiles) comparable to those in healthy individuals.
- Nearly half of all cases of premature coronary disease are missed when using only current standard guidelines for cholesterol testing.

The **Comprehensive Cardiovascular Profile 2.0** includes:

Advanced Lipid Profile with Fractionation

- IDL-Atherogenic, triglyceride-rich particle linked to insulin resistance, cardiac lesions, and carotid wall thickening.
- LDL Density-Cited as the strongest physiologic risk factor in coronary artery disease and the best predictor of arteriographic progression.

Independent Risk Markers

- Homocysteine identifies methylation defects associated with poor endothelial integrity, vascular dysfunction and atherosclerotic lesions. Implicated in myocardial infarction, diabetes, senile dementia, and depression.

Relative Risk Indices

- Translates results from key markers into specific numerical risks based on the published literature.

Metabolic Syndrome Alerts

- Allows clinical identification of Syndrome X, one of the fastest-growing epidemics among patients today.

• Analytes:

Total Cholesterol
 Total HDL
 Total LDL [LDL, Lp(a), and IDL]
 Total triglycerides
 Total VLD
 HDL2 Cholesterol
 HDL3 Cholesterol
 LDL Cholesterol
 Lp(a)
 IDL Cholesterol
 VLDL 1,2, VLDL 3
 LDL Density Pattern
 hs C-Reactive Protein
 Fibrinogen, Glucose (fasting)
 Homocysteine

• Specimen Requirements:

- 1 ml plasma and
- 2 ml serum, fasting

• Before Taking this Test:

- Fast overnight (at least 12 hours)
- Inform practitioner about medication and supplement use, including aspirin and cholesterol-lowering drugs
- See instructions inside test kit for details

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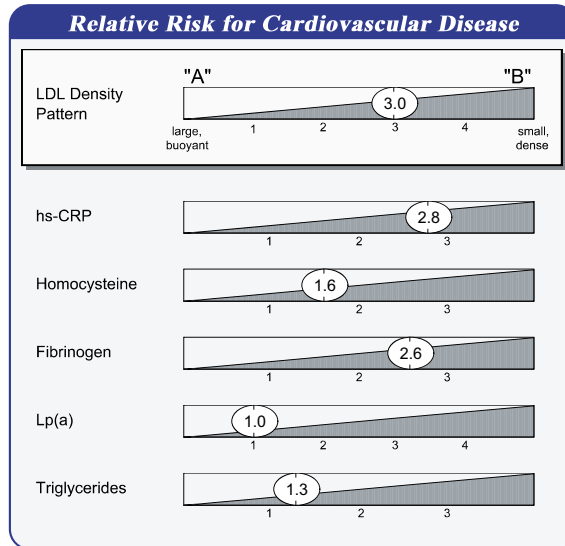
Patient: **SAMPLE PATIENT** Order Number:
Age: 38 Completed:
Sex: M Received:
MRN: Collected:

SAMPLE REPORT

Lipid Markers		
Measured Values	Result	Reference Range
Total Cholesterol	262.0 H	<=200.0 mg/dl
Total HDL (HDL ₂ , 3)	35.0 L	>=40.0 mg/dl
Total LDL (LDL, Lp(a), IDL)	202.0 H	<=130.0 mg/dl
Total Triglycerides	163.0 H	<=150.0 mg/dl
Total VLDL (VLDL ₁ , 2, 3)	24.0	<=30.0 mg/dl
Calculated Values		
Non-HDL Cholesterol (LDL+VLDL)	226.0 H	<=160.0 mg/dl
Total Cholesterol : HDL Ratio	7.5 H	<=4.8

Lipid-Independent Risk Factors		
	Result	Reference Range
hs-CRP	5.19 H	<=1.69 mg/L
Homocysteine	10.30 H	3.00-10.00 umol/L
Fibrinogen	385.0 H	180.0-350.0 mg/dL

Lipid Fractionation / VAP™ Technology		
HDL Fractions	Result	Reference Range
HDL ₂ (most protective)	5.0 L	>=10.0 mg/dl
HDL ₃ (less protective)	30.0	>=30.0 mg/dl
LDL Fractions		
LDL	169.0 H	<=100.0 mg/dl
IDL	28.0 H	<=20.0 mg/dl
Lp(a)	5.0	<=10.0 mg/dl



LDL Density Pattern		
	Large, Bouyant LDL	Small, Dense LDL
LDL Density Pattern	<input type="checkbox"/>	<input checked="" type="checkbox"/> B
Triglyceride-rich Fractions		
	Result	Reference Range
VLDL _{1,2} (buoyant)	10.0	<=20.0 mg/dl
VLDL ₃ (dense, remnant)	13.0 H	<=10.0 mg/dl

Metabolic Syndrome Alerts		
	Result	Reference Range
Fasting Glucose	91	70-105 mg/dL
Elevated Tri-glycerides	<input checked="" type="checkbox"/>	
Low HDL ₂	<input checked="" type="checkbox"/>	
Elevated Fasting Glucose	<input type="checkbox"/>	
Small Dense LDL	<input checked="" type="checkbox"/>	
Elevated IDL	<input checked="" type="checkbox"/>	
Elevated VLDL ₃	<input checked="" type="checkbox"/>	
Elevated Waist:Hip Ratio	<input type="checkbox"/>	
Hyper-Tension	<input type="checkbox"/>	

Physician's Assessment

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This test reveals important clinical information about:

- **Patient response to lipid-altering and risk reducing treatments**, allowing more precise, cost-effective interventions.
- **Atherogenic cholesterol fractions** linked to four-fold higher cardiovascular risk and accelerated arterial plaque progression (even when total LDL is normal).
- **Monitoring therapy** to lower cholesterol particle density and increase size, a strategy shown to hasten regression of arterial plaques.
- **The dynamics of nutrient metabolism**, blood regulation, inflammation and other important independent risk factors underlying the synergistic progression of cardiovascular disease.

For test kits, clinical support, or more information contact:

Client Services
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More detailed publications with references are also available: www.GDX.net