



Patient: **SAMPLE PATIENT**

DOB:

Sex:

MRN:

**3700 CV Health -Plasma & Serum**

Methodology: Chemiluminescent, Enzymatic, Immunoturbidimetric and NMR

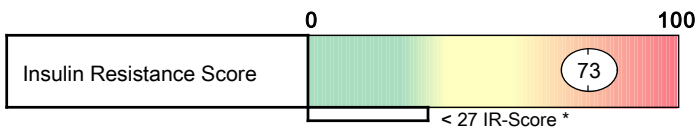
**Lipid Markers**

Cholesterol			Particle Concentration & Size by NMR		
	Result	Reference Range		Result	Reference Range
LDL- Cholesterol	95	< 100 mg/dL	LDL-Particle # (LDL-P)	1,050 H	< 1,000 nmol/L
HDL- Cholesterol	48	> 39 mg/dL	HDL-Particle # (HDL-P)	2.5 L	> 34.9 µmol/L *
Triglycerides	147	< 150 mg/dL	LDL-Size	Large (Pattern A): 23.0-20.6 * Small (Pattern B): 20.0	
Total Cholesterol	158	< 200 mg/dL	Lp(a)	11	< 30 mg/dL

**Independent Risk Factors**

Test	Result	Reference Range	Relative Risk for Cardiovascular Disease
hs-CRP	0.89	< 1.00 mg/L	1.0
Lp-PLA <sub>2</sub> (PLAC)	245 H	< 225 nmol/min/mL	2.10
Fibrinogen	343	198-437 mg/dL	1.7
Homocysteine	8.8	3.7 - 10.4 µmol/L	1.0

**Insulin Resistance Score by Lipid Fractionation**



The Insulin Resistance Score combines Small LDL-Particle #, LDL Size, Large VLDL-Particle #, VLDL Size, Large HDL-Particle # and HDL Size to assess insulin resistance and diabetes risk.

HDL <sub>L</sub>	LDL <sub>s</sub>	VLDL <sub>L</sub>	HDL Size	LDL Size	VLDL Size
2.5	255	4.5	8.4	20.0	47.6
>7.3 µmol/L *	<117 nmol/L *	<0.9 nmol/L *	>9.6 nm *	>21.2 nm *	<42.4 nm *

Optimal      Borderline      Abnormal

**Percentiles Apply to Biomarkers indicated with \* and are performed using NMR technology.**

Optimal: Either 0-25th or 75-100th percentile based on reference population.

Borderline: 25-75th Percentile

Abnormal: Inverse of Optimal (0-25th or 75-100th percentile distribution)



## Commentary

Methodology: Chemiluminescent, NMR, Immunoturbidometric and Enzymatic.

The LP(a), Lp-PLA<sub>2</sub> (PLAC), hs-CRP, Homocysteine and Fibrinogen analytes have been cleared by the U.S. Food and Drug Administration, and are performed by Genova Diagnostics, Inc. All other assays are performed by LabCorp, 1447 York Court, Burlington, NC 27215, CLIA#34D0655059.

The reference range for homocysteine is based on the sex-specific 5th to 95th percentile values for men and women (20 to 39 years of age) in the NHANES nutritionally replete cohort. *Annals of Internal Medicine* 1999; 131 (331-338).

The methodology for Lp-PLA<sub>2</sub> (PLAC) has been changed to measure activity. Please note the reference range and relative risk for cardiovascular disease have been updated.