

Patient: **SAMPLE PATIENT**

DOB:

Sex:

MRN:

## 3702 Cardio Check - Serum

Methodology: Enzymatic, Immunoturbidimetric, Chemiluminescent and Turbidimetric/Immunoturbidimetric

### Cardio Check

#### Lipids

#### Cholesterol

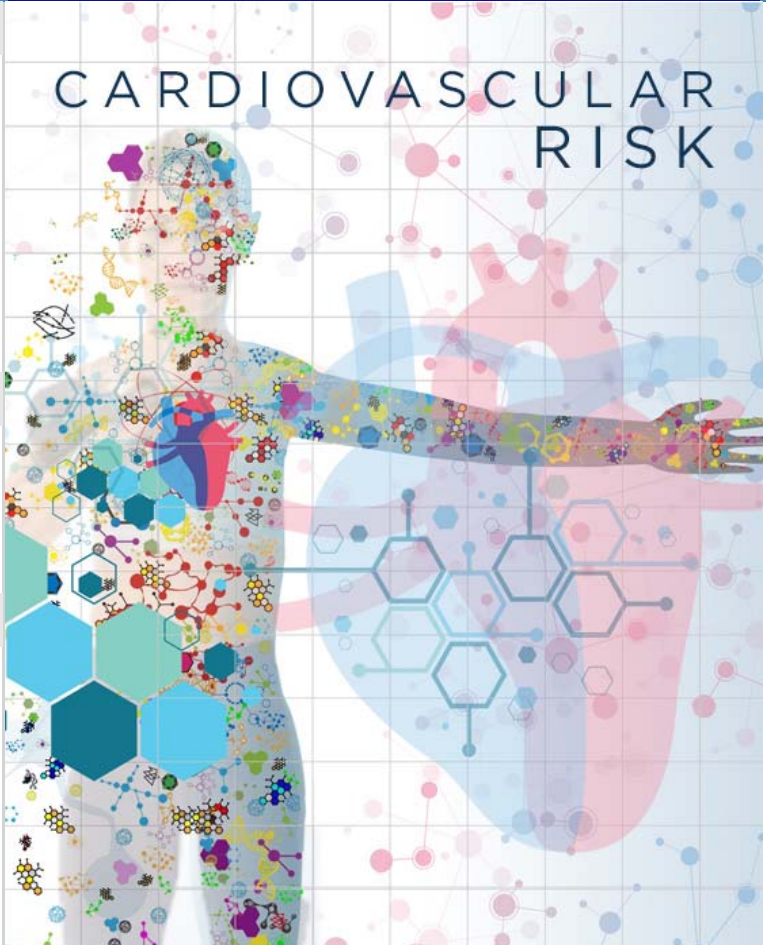
	Reference Range
LDL Cholesterol	168 <math>\leq 99 \text{ mg/dL}</math>
HDL Cholesterol	64 <math>\geq 40 \text{ mg/dL}</math>
Triglycerides	74 <math>\leq 149 \text{ mg/dL}</math>
Total Cholesterol	247 150-199 mg/dL

#### Cholesterol Ratios

Triglycerides/HDL*	1.2 <math>\leq 2.0</math>
Total Cholesterol/HDL*	3.86 <math>\leq 5.99</math>

#### Lipoproteins

	Reference Range
Apo A-1	165 95-186 mg/dL
Apo B	127 49-173 mg/dL
Apo B / Apo A-1*	0.77 <math>\leq 0.95</math>
Lp(a)	67 <math>\leq 29 \text{ mg/dL}</math>



#### Independent Risk Factors

#### Cardiometabolic Markers

	Reference Range
hs-CRP	2.19 <math>\leq 0.99 \text{ mg/L}</math>
Homocysteine*	9.2 5.2-11.4 $\mu\text{mol/L}$
Insulin *	2.4 1.9-23.0 $\mu\text{IU/mL}$

#### Sex Hormone Markers

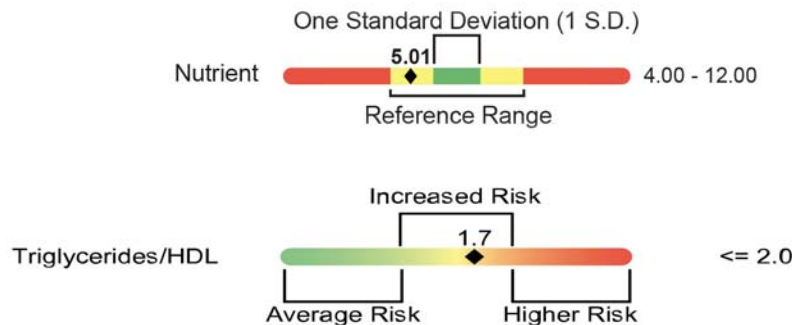
	Reference Range
Testosterone, Total	5.52 1.75-7.81 ng/mL
Sex Hormone Binding Globulin	32.1 13.3-89.5 nmol/L

## Commentary

The performance characteristics of all assays have been verified by Genova Diagnostics Inc. All Assays have been cleared by the U.S. Food and Drug Administration.

Commentary is provided to the practitioner for educational purposes and should not be interpreted as diagnostic or as treatment recommendations. Diagnosis and treatment decisions are the practitioner's responsibility.

The **Reference Range** is a statistical interval representing 95% or 2 Standard Deviations (2 S.D.) of the reference range population. One Standard Deviation (1 S.D.) is a statistical interval representing ~68% of the reference population. Values between 1 and 2 S.D. are not necessarily abnormal. Clinical Correlation is suggested.



### \*Additional Interpretive Information:

**Triglycerides/HDL Ratio:** The expected range is based on a thorough analysis of the peer-reviewed literature regarding the relationship between Trg/HDL ratio and cardiometabolic risk. The increased risk associated with higher values are highlighted in *Diabetes Metab Syndr 2019; 13(1):382-388*. More information can be found in the Cardio Check support guide and the literature listed below:

<https://pubmed.ncbi.nlm.nih.gov/30641729/>

**Total Cholesterol/HDL Ratio:** The expected range is based on a thorough analysis of the peer-reviewed literature regarding the relationship between TC/HDL ratio and cardiovascular disease risk. The increased risk associated with higher values are highlighted in *J Am Col Card 2010; 55(1):35-41*. More information can be found in the Cardio Check support guide and the literature listed below.

<https://pubmed.ncbi.nlm.nih.gov/20117361/>

**Apo B/ Apo A-1:** The expected range is based on a thorough analysis of the peer-reviewed literature regarding the relationship between the Apo B/ Apo A-1 ratio and cardiovascular disease risk. The increase risk associated with higher values are highlighted in *Annals of Internal Medicine 2007; 146:640-8*. More information can be found in the Cardio Check support guide and literature listed below:

<https://pubmed.ncbi.nlm.nih.gov/17470832/>

**Homocysteine:** The reference range for the biomarker 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; 141 (331-338)*.

**Insulin:** Fasting insulin levels over 8.57  $\mu$ U/ml were shown to be predictors of metabolic syndrome development.

For more information regarding Cardio Check clinical interpretation, please refer to the Cardio Check Support Guide at [www.gdx.net/cardioguide](http://www.gdx.net/cardioguide)