

— Cardiovascular Health

The circulatory system, also known as the cardiovascular system (CVS), is a vast network of organs and vessels that are responsible for the flow of blood, nutrients, oxygen, other gases, and hormones ... [See more](#)

Cholesterol & Triglycerides

CHOLESTEROL, T...
(mg/dL)

172

Range: <200

CHOLESTEROL, TOTAL

(mg/dL)

Cholesterol is a waxy, fat-like substance that occurs naturally in all parts of the body. Your body needs some cholesterol to work properly. But if you have too much in your blood, it can combine with ... [See more](#)



TRIGLYCERIDES
(mg/dL)

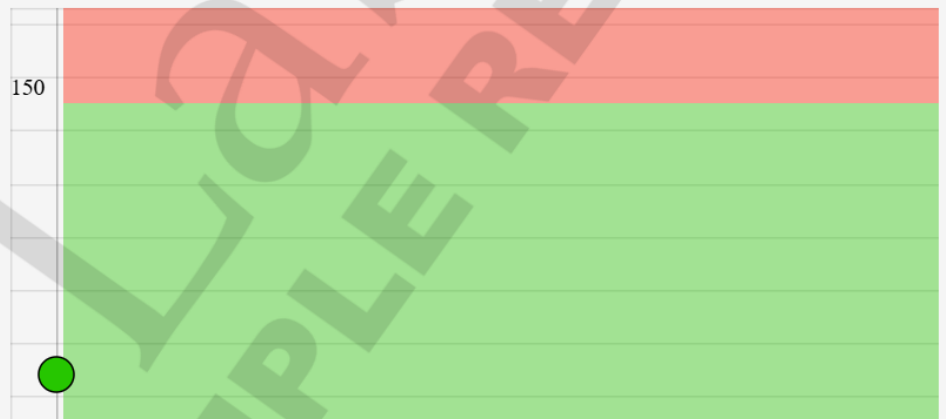
48

Range: <150

TRIGLYCERIDES

(mg/dL)

Triglycerides are a form of fat and a major source of energy for the body. This test measures the amount of triglycerides in the blood. Most triglycerides are found in fat (adipose) tissue, but some ... [See more](#)



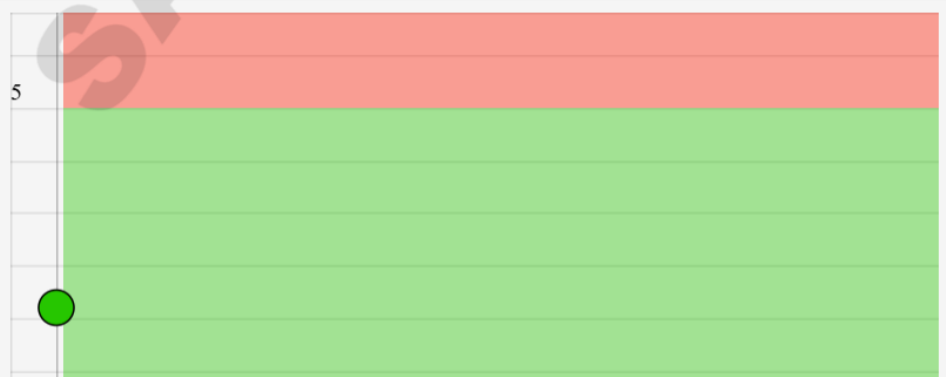
CHOL/HDLC RATIO
(calc)

3.1

Range: <5.0

CHOL/HDLC RATIO

(calc)



NON HDL CHOLE...
(mg/dL (calc))

116

Range: <130

NON HDL CHOLESTEROL

(mg/dL (calc))



Result Comments

For patients with diabetes plus 1 major ASCVD risk factor, treating to a non-HDL-C goal of <100 mg/dL (LDL-C of <70 mg/dL) is considered a therapeutic option.

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HDL Particles

High density lipoprotein (HDL) particles are often referred to as good cholesterol, because they are associated with a decreased risk of developing cardiovascular disease.

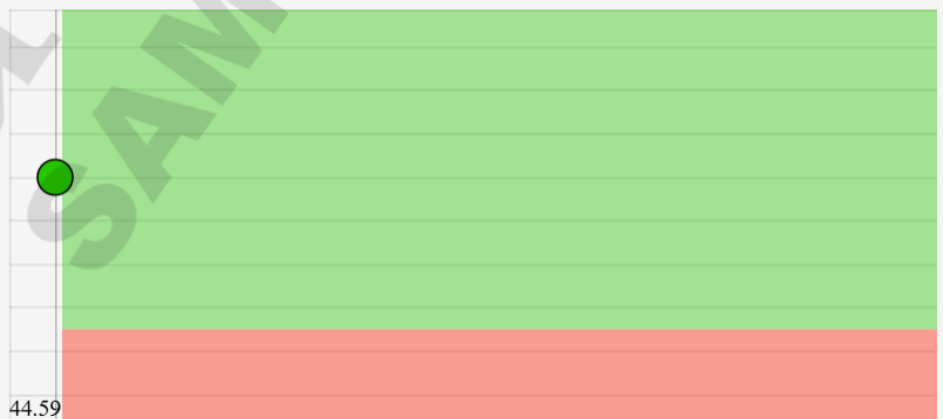
HDL CHOLESTER...
(mg/dL)

56

Range: >49

HDL CHOLESTEROL

(mg/dL)



HDL LARGE

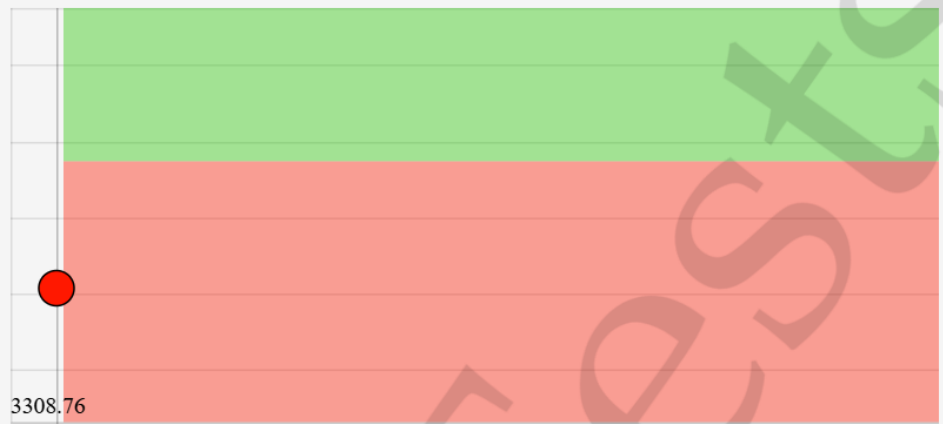
5071 L

(nmol/L)

Range: >6729

HDL LARGE

(nmol/L)



Result Comments

Relative Risk: Optimal >6729; Moderate 6729-5353; High <5353. Male Reference Range: 4334 to 10815 nmol/L; Female Reference Range: 5038 to 17886 nmol/L.

LDL Particles

Low-density lipoprotein particle (LDL-P) testing evaluates LDL particles according to their number, size, density, and/or electrical charge. Low-density lipoproteins (LDL) are particles that transport ... [See more](#)

LDL-CHOLESTEROL

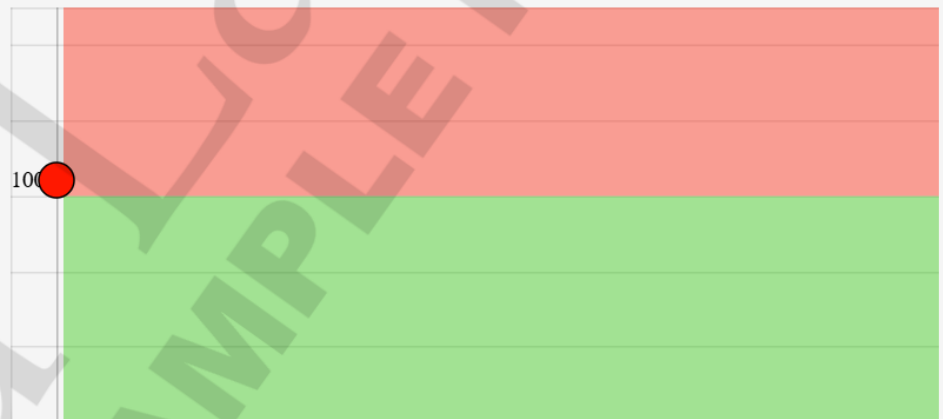
102 H

(mg/dL (calc))

Range: <100

LDL-CHOLESTEROL

(mg/dL (calc))



Result Comments

Desirable range <100 mg/dL for primary prevention; <70 mg/dL for patients with CHD or diabetic patients with ≥ 2 CHD risk factors.

LDL-C is now calculated using the Martin-Hopkins calculation, which is a validated novel method providing better accuracy than the Friedewald equation in the estimation of LDL-C. Martin SS et al. JAMA. 2013;310(19):

2061-2068 (<http://education.QuestDiagnostics.com/faq/FAQ164>)

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Martin SS et al. JAMA. 2013;310(19): 2061-2068

(<http://education.QuestDiagnostics.com/faq/FAQ164>)

LDL PARTICLE NU...

1480 H

(nmol/L)

Range: <1138

LDL PARTICLE NUMBER

(nmol/L)



Result Comments

Relative Risk: Optimal <1138; Moderate 1138-1409; High >1409. Male and Female Reference Range: 1016 to 2185 nmol/L.

LDL SMALL

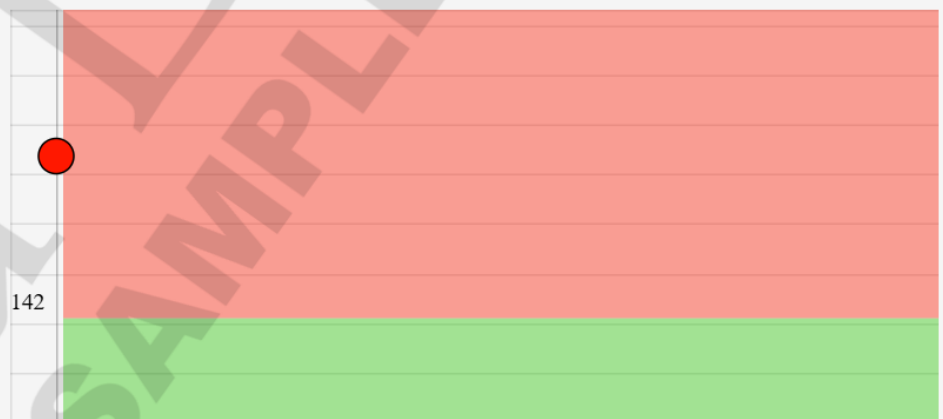
207 H

(nmol/L)

Range: <142

LDL SMALL

(nmol/L)



Result Comments

Relative Risk: Optimal <142; Moderate 142-219; High >219. Male Reference Range: 123 to 441 nmol/L; Female Reference Range: 115 to 386 nmol/L.

LDL MEDIUM
(nmol/L)

273 H

Range: <215

LDL MEDIUM
(nmol/L)



Result Comments

Relative Risk: Optimal <215; Moderate 215-301; High >301.
Male Reference Range: 167 to 485 nmol/L; Female Reference Range: 121 to 397 nmol/L.

LDL PATTERN
(Pattern)

A

Range: A

LDL PATTERN
(Pattern)

Result Comments

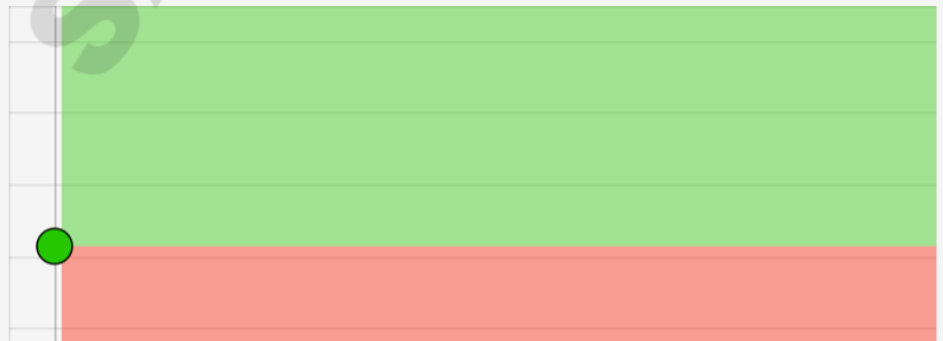
Relative Risk: Optimal Pattern A; High Pattern B. Reference Range: Pattern A.

LDL PEAK SIZE
(Angstrom)

223.0

Range: >222.9

LDL PEAK SIZE
(Angstrom)



Result Comments

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes. Relative Risk: Optimal >222.9; Moderate 222.9–217.4; High <217.4. Male and Female Reference Range: 216 to 234.3 Angstrom. Adult cardiovascular event risk category cut points (optimal, moderate, high) are based on an adult U.S. reference population plus two large cohort study populations. Association between lipoprotein subfractions and cardiovascular events is based on Musunuru et al. *ATVB*.2009;29:1975. For additional information, please refer to <http://education.QuestDiagnostics.com/faq/FAQ134> (This link is being provided for informational/educational purposes only.)

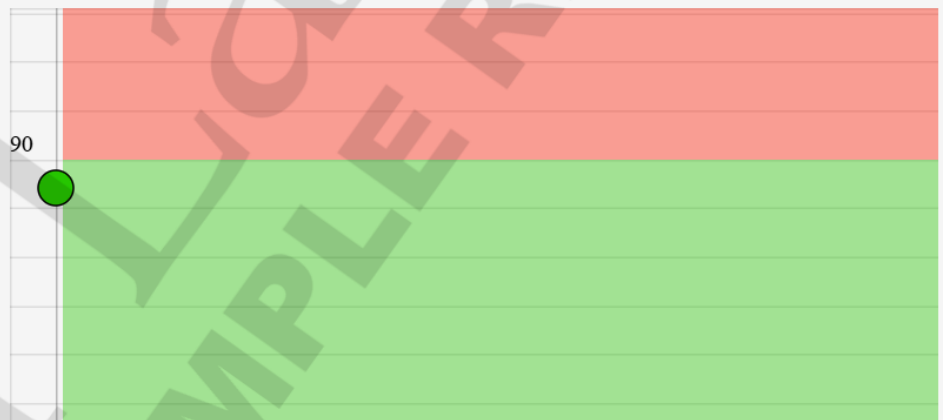
APOLIPOPROTEIN...
(mg/dL)

87

Range: <90

APOLIPOPROTEIN B

(mg/dL)



Result Comments

Risk: Optimal <90 mg/dL; Moderate 90–119 mg/dL; High \geq 120 mg/dL; Cardiovascular event risk category cut points (optimal, moderate, high) are based on National Lipid Association recommendations– Jacobson TA et al. *J of Clin Lipid*. 2015; 9: 129–169 and Jellinger PS et al. *Endocr Pract*. 2017;23(Suppl 2):1–87.

LIPOPROTEIN (a)
(nmol/L)

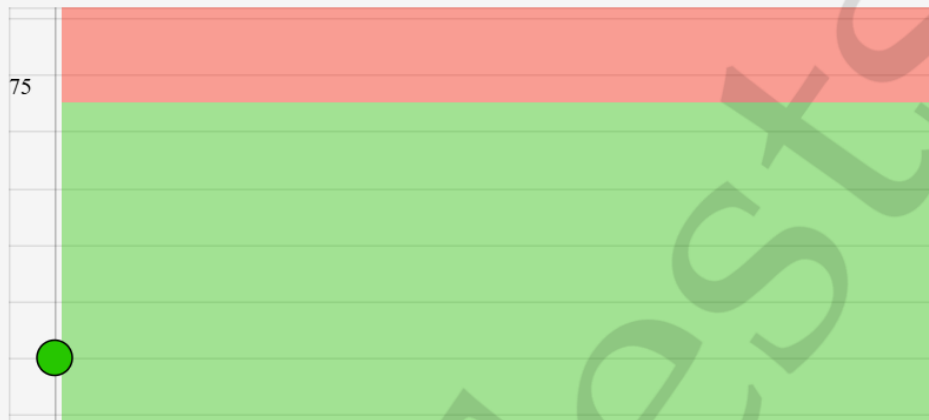
30

Range: <75

LIPOPROTEIN (a)

(nmol/L)

Lipoprotein-a, or Lp(a) are molecules made of proteins and fat. They carry cholesterol and similar substances through the blood. A high level of Lp(a) is considered a risk factor for heart disease. ... [See more](#)



Result Comments

Risk: Optimal <75 nmol/L; Moderate 75-125 nmol/L; High >125 nmol/L. Cardiovascular event risk category cut points (optimal, moderate, high) are based on Tsimika S. JACC 2017;69:692-711.

LP PLA2 ACTIVITY

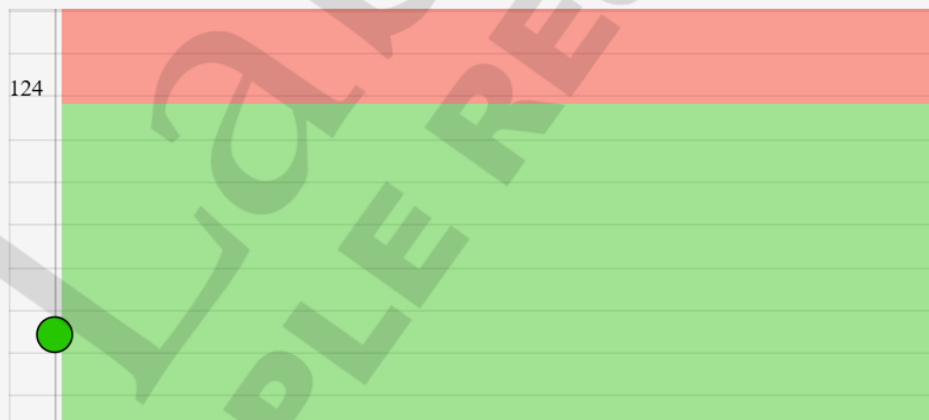
(nmol/min/mL)

97

Range: <124

LP PLA2 ACTIVITY

(nmol/min/mL)



Result Comments

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Relative Risk: Optimal ≤ 123 nmol/min/mL; High >123 nmol/min/mL.

See Note 1

Note 1

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Inflammation

HS CRP
(mg/L)

0.8

Range: <1.0

HS CRP

(mg/L)

A high-sensitivity CRP (hs-CRP) test may be used by itself, in combination with other cardiac risk markers, or in combination with a lipoprotein-associated phospholipase A2 (Lp-PLA2) test that evaluates ... [See more](#)



Result Comments

Reference Range: Optimal <1.0 mg/L, according to Jellinger PS et al. Endocr Pract.2017;23(Suppl 2):1-87. The AHA/CDC Guidelines recommend hs-CRP ranges for identifying Relative Cardiovascular Risk in patients ages >17 years: <1.0 mg/L Lower Relative Cardiovascular Risk; 1.0-3.0 mg/L Average Relative Cardiovascular Risk; 3.1-10.0 mg/L Higher Relative Cardiovascular Risk. If result is between 3.1 and 10.0 mg/L, consider retesting in 1-2 weeks to exclude a benign transient elevation secondary to infection or inflammation from the baseline CRP value. Persistent elevations of >10.0 mg/L upon retesting may be associated with infection and inflammation. The AHA/CDC recommendations are based on Pearson TA, Mensah GA, Alexander RW, et al. Markers of inflammation and cardiovascular disease: application to clinical and public health practice: A statement for healthcare professionals from the Centers for Disease Control and Prevention and the American Heart Association. Circulation 2003; 107(3): 499-511.

For ages >17 Years:

| hs-CRP mg/L | Risk According to AHA/CDC Guidelines |
|-------------|--|
| <1.0 | Lower relative cardiovascular risk. |
| 1.0-3.0 | Average relative cardiovascular risk. |
| 3.1-10.0 | Higher relative cardiovascular risk. Consider retesting in 1 to 2 weeks to exclude a benign transient elevation |

in the baseline CRP value secondary to infection or inflammation.
>10.0 Persistent elevation, upon retesting, may be associated with infection and inflammation.

Pearson TA, Mensah GA, Alexander RW, et al. Markers of inflammation and cardiovascular disease: application to clinical and public health practice: A statement for healthcare professionals from the Centers for Disease Control and Prevention and the American Heart Association. *Circulation* 2003; 107(3): 499-511.

Uita Lab Tests
SAMPLE RESULTS