

Patient Information	Specimen Information	Client Information

Cardio IQ®

Test Name	Current		Risk/Reference Interval			Units	Historical Result & Risk
	Result & Risk		Optimal	Moderate	High		
	Optimal	Non-Optimal					
LIPID PANEL							
CHOLESTEROL, TOTAL	179		<200	N/A	>=200	mg/dL	
HDL CHOLESTEROL	91		>=50	N/A	<50	mg/dL	
TRIGLYCERIDES	51		<150	150-199	>=200	mg/dL	
LDL-CHOLESTEROL	75		<100	100-129	>129	mg/dL (calc)	
CHOL/HDLRATIO	2.0		<=3.5	3.6-5.0	>5.0	calc	
NON-HDL CHOLESTEROL	88		<130	130-189	>=190	mg/dL (calc)	
LIPOPROTEIN FRACTIONATION, ION MOBILITY							
LDL PARTICLE NUMBER	603		<1138	1138-1409	>1409	nmol/L	
LDL SMALL	90		<142	142-219	>219	nmol/L	
LDL MEDIUM	96		<215	215-301	>301	nmol/L	
HDL LARGE	8457		>6729	6729-5353	<5353	nmol/L	
LDL PATTERN	A		A	N/A	B	Pattern	
LDL PEAK SIZE	224.8		>222.9	222.9-217.4	<217.4	Angstrom	
APOLIPOPROTEINS							
APOLIPOPROTEIN B	67		<90	90-129	>=130	mg/dL	
LIPOPROTEIN (a)		261	<75	75-125	>125	nmol/L	

For details on reference ranges please refer to the reference range/comment section of the report.

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Reference Range/Comments

Analyte Name	In Range	Out Range	Reference Range	Lab
LIPOPROTEIN (a)		261	<75 nmol/L	
Verified by repeat analysis. 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.				
APOLIPOPROTEIN B	67		<90 mg/dL	
Reference Range <90				
Risk Category:				
Optimal <90				
Moderate 90-129				
High > or = 130				
A desirable treatment target may be <80 mg/dL or lower depending on the risk category of the patient including patients on lipid lowering therapies, patients with ASCVD, diabetes with >1 risk factors, Stage 3 or greater CKD with albuminuria, or heterozygous familial hypercholesterolemia. ApoB relative risk category cut points are based on AACE/ACE and ACC/AHA recommendations (Grundy SM, et al. 2019. doi:10.1016/j.jacc.2018.11.002; Handelsman Y, et al. 2020. doi:10.4158/CS-2020-0490).				
CHOL/HDLRATIO	2.0		<5.0 calc	
CHOLESTEROL, TOTAL	179		<200 mg/dL	
HDL CHOLESTEROL	91		>49 mg/dL	
HDL LARGE	8457		>6729 nmol/L	
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 MEDIUM	96		<215 nmol/L	
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 PARTICLE NUMBER	603		<1138 nmol/L	
Relative Risk: Optimal <1138; Moderate 1138-1409; High >1409. Male and Female Reference Range: 1016 to 2185 nmol/L.				
LDL PATTERN	A		A Pattern	
Relative Risk: Optimal Pattern A; High Pattern B. Reference Range: Pattern A.				
LDL PEAK SIZE	224.8		>222.9 Angstrom	
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.)				
LDL SMALL	90		<142 nmol/L	
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-CHOLESTEROL	75		<100 mg/dL (calc)	
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)				
NON HDL CHOLESTEROL	88		<130 mg/dL (calc)	
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.				
TRIGLYCERIDES	51		<150 mg/dL	

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