Orderable - LIPIDS

Turn Around Time: 24 hours

Laboratory:
Core Lab

Requisition:
GENERAL LABORATORY REQUISITION

Method of Analysis:
Calculated (Friedewald equation):

[LDL-chol] = [Total chol] - [HDL-chol] - ([TG]/2.2)

Test Schedule:
As required

Alternate Name(s):

Low Density Lipoprotein Cholesterol
Cholesterol-LDL
LDL

Specimen:

Adult	Pediatric
4.5 mL Green (Lithium Heparin) top Vacutainer	0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube

Collection Information:

12-14 hour fast.
Habitual diet and activity, stable diet over preceding 4 weeks.
No recent illness. LDL levels are reduced for up to 8 weeks with acute illness (e.g. myocardial infarction, acute infection) and assays should not be performed during this time.

Reference Ranges:

Cholesterol target levels are dependent upon patient 10-year risk of coronary artery disease (Can J Cardiol 2016). "Cardiovascular Age" and the Framingham Risk Score (FRS).

Table Treatment Thresholds and Target Lipid Levels*

Risk Level	Initiate therapy if:	Primary Target LDL-C	Alternate Target
High			
FRS ≥20%	Consider treatment in all patients	<2.0 mmol/L or <50% decrease	Apo B <0.8 g/L Non HDL-C <2.6 mmol/L

		LDL-C	
Intermediate			
FRS 10%-19%	LDL-C ≥3.5 mmol/L	<2 mmol/L or >50% decrease in LDL-C	Apo B <0.80 g/L Non HDL-C <2.6
	Apo B ≥1.2 g/L or Non-HDL-C ≥4.3 mmol/L		
Low			
FRS <10%	LDL-C ≥ 5.0 mmol/L Familial hypercholesterolemia	>50% decrease in LDL-C	

FRS: Framingham Risk Score
2016 Canadian Cardiovascular Society Guidelines for the management of dyslipidemia for the prevention of cardiovascular disease in the adult. Can J Cardiol. 2016;32:1263-82