HDL Function Panel with HDLfx pCAD Score

CPT Code: 82172 (x5)
Order Code: 37812
Includes: AALP ApoA1, AALP ApoC1, AALP ApoC2, AALP ApoC3, AALP ApoC4, HDLfx pCAD Score
ABN Requirement: No
Specimen: Serum
Volume: 1.0 mL
Minimum Volume: 0.5 mL
Container: Gel-barrier tube (SST)

Collection:

1. Collect and label sample according to standard protocols.
2. Gently invert tube 5 times immediately after draw. DO NOT SHAKE.
3. Allow blood to clot 30 minutes.
4. Centrifuge for 10 minutes.

Fasting: Patient should be fasting 10-12 hours.

Transport: Store serum at 2°C to 8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

Stability:

Ambient (15-25°C): Not Acceptable
Refrigerated (2-8°C): 21 days
Frozen (-20°C): 21 days

Causes for Rejection: Improper labeling; samples not stored properly; samples older than stability limits; moderately lipemic specimens

Methodology: Tandem Mass Spectrometry (LC-MS/MS)

Turn Around Time: 10 days

Reference Range:

Relative Risk Intervals:

Test Comment: Based on a population of patients diagnosed with CAD (defined as having a coronary lesion consistent with 50% blockage or more; N=149) and a study control group of healthy individuals without CAD (N =69), a pCAD score greater than 0.90 indicates higher relative risk for having coronary atherosclerosis with a clinical sensitivity of 76% and clinical specificity of 75%. Case and control samples were selected from the Fairbanks Institute for Healthy Communities biobank cardiovascular disease study with analysis performed by Cleveland HeartLab.

Clinical Significance: There is strong clinical evidence that low HDL cholesterol (HDL-C) levels contribute to cardiovascular risk as demonstrated in multiple mechanistic, epidemiological, and clinical intervention trials. Studies investigating pharmacologically induced HDL-C elevations demonstrated no incremental benefit, leading to a consensus that knowledge of HDL function is needed to understand the clinical meaning of low or high HDL-C levels. The HDL Function Panel with HDLfx pCAD Score provides an assessment of 5 apolipoproteins bound to ApoA-1 lipoprotein particles, which have similar physical and chemical properties to HDL.1 These particles are isolated using ApoA-1 affinity technology for rapid assessment of HDL function. The HDLfx pCAD Score is derived from the values of the 5 apolipoproteins and indicates relative risk for coronary atherosclerosis.[1,2]

References:

1. Natarajan P, et al. *J Am Coll Cardiol*. 2019;73(17):2135-2145.
2. Jin Z, et al. *Clin Chem*. 2019;65(2):282-290.

The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.