

— 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 to and from cells. Without the circulatory system, the body would not be able to fight disease or maintain a stable internal environment like a proper temperature and pH, referred to as homeostasis. The cardiovascular system is made up of three independent systems that work together: the heart (cardiovascular), lungs (pulmonary) and arteries, veins, coronary and portal vessels (systemic).

[Hide](#)

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 lipids throughout the body. Each particle contains a combination of protein, cholesterol, triglyceride, and phospholipid molecules. Their composition changes as they circulate in the blood. Some molecules are removed and others are added, resulting in lipoprotein particles whose properties vary from large and fluffy to small and dense. LDL particle testing determines the relative amounts of particles of differing properties. Traditional lipid testing measures the amount of LDL cholesterol (LDL-C) present in the blood, but it does not evaluate the number of particles of LDL (LDL-P). Some studies have shown that increased numbers of small dense LDL particles are more likely to cause atherosclerosis than fewer light, fluffy LDL particles. An increased number of small, dense LDL could be one of the reasons that some people have heart attacks even though their total and LDL cholesterol concentrations are not particularly high."

[Hide](#)

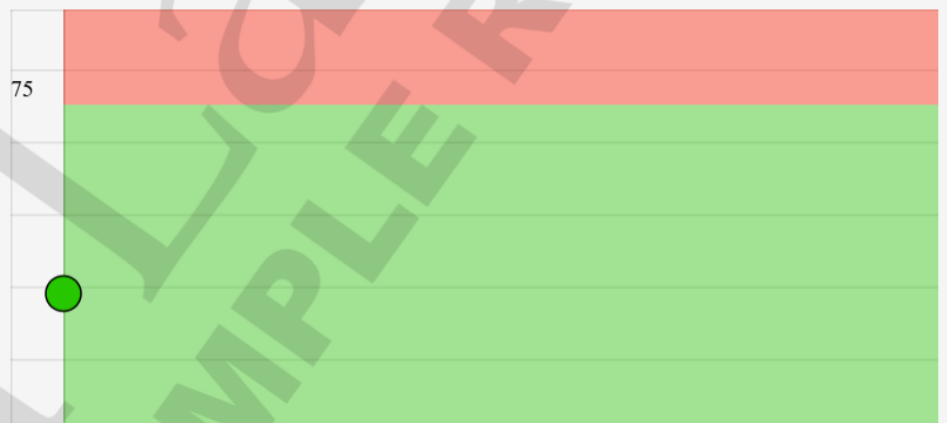
LIPOPROTEIN (a)
(nmol/L)

49

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.