# Lp-PLA<sub>2</sub>Activity

Know your risk<sup>™</sup> for heart disease.



### What is the Lp-PLA, Activity test?

The Lp-PLA<sub>2</sub> Activity test measures the activity (or actions) of Lp-PLA<sub>2</sub> in the bloodstream. Lp-PLA<sub>2</sub> is an enzyme that can assess the amount of inflammation in your arteries due to a build-up of cholesterol.

### Why should I get the Lp-PLA<sub>2</sub> Activity test?

The Lp-PLA $_2$  Activity test can help assess your risk for heart disease. When LDL cholesterol (the carrier of "bad" cholesterol) gets into your artery wall, the body tries to get rid of it by making Lp-PLA $_2$ . Unfortunately, the actions of Lp-PLA $_2$  contribute to increased inflammation and increased cholesterol accumulation in the artery wall, forming what is called plaque. Inflammation can also make the cap covering the plaque thinner, which makes it more likely to rupture.

The body responds to the rupture by forming a blood clot, which can block the flow of blood. If the blood flowing to the heart is blocked, it may cause a heart attack, while blocked blood flow to the brain may cause a stroke.

In short, the Lp-PLA<sub>2</sub> Activity test can help your medical provider better understand the health of your arteries and determine if you are actively growing plaque that is at risk for rupturing and developing a heart attack or stroke.

# inflammation testing from ClevelandHeartLab

# What can I do to help lower my Lp-PLA<sub>2</sub> Activity levels?

There are a number of things you can do to lower your overall risk of heart disease, as well as lowering your Lp-PLA<sub>2</sub> Activity levels.

- Adopt a heart-healthy diet by eating more vegetables, fruits, and whole grain foods and reducing the amount of fatty foods you eat.
- Exercise more and on a consistent basis.
- If you smoke, quit. It is not easy but there are programs and strategies (including over-the-counter and prescription medications) that can improve your chance of success. Talk with your medical provider to find what works best for you.
  - See your dentist as periodontal disease is a contributor to heart disease.
    - There are prescription and non-prescription medicines, as well as supplements, your medical provider can give you that reduce Lp-PLA<sub>2</sub> Activity levels.

Your medical provider will work with you to develop a treatment plan that is right for you to help reduce your risk of heart disease.

# When should the Lp-PLA<sub>2</sub> Activity test be performed?

The Lp-PLA $_2$  Activity test can be performed at the same time your medical provider runs other tests, such as a cholesterol test, to determine if you are at increased risk for heart disease or stroke. The Lp-PLA $_2$  Activity test is recommended if you have two or more risk factors for heart disease, such as high cholesterol or obesity.

## How should I prepare for the Lp-PLA<sub>2</sub> Activity test?

The Lp-PLA<sub>2</sub> Activity test does not require any special preparation. You do not need to be fasting, and can be taking medications.

### **RELATIVE RISK**

Lp-PLA<sub>2</sub> Activity (nmol/min/mL)

<75 Low

≥75 High

