

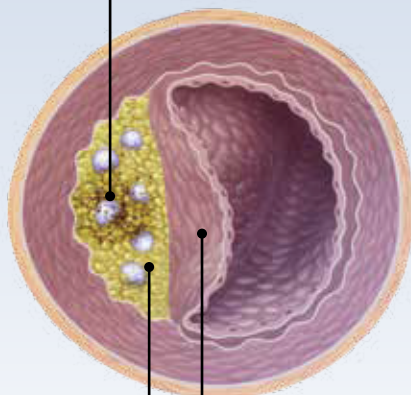
The Importance of Lp-PLA₂ as a CHD Risk Assessment Biomarker

The PLAC[®] Test Clearly Identifies Active Cardiovascular Inflammatory Disease

The PLAC[®] Test is the only blood test that measures Lp-PLA₂ – a vascular-specific inflammatory marker critical in the formation of rupture-prone plaque.¹

Stable Plaque

Low Lp-PLA₂



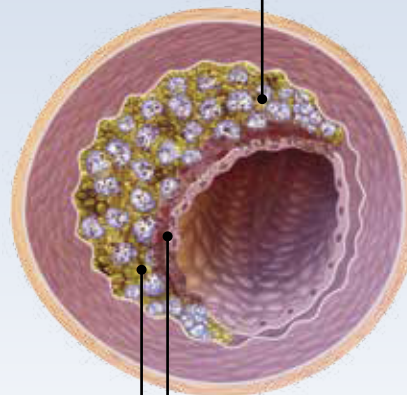
Lipid pool

Thick fibrous cap

Cholesterol causes a fatty deposit called plaque that builds up inside the walls of the arteries

Rupture-Prone Plaque

High Lp-PLA₂



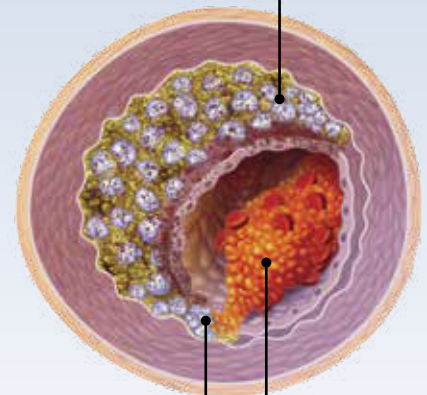
Expanding lipid pool

Thin fibrous cap

When arterial walls become inflamed, the enzyme Lp-PLA₂ is produced within the plaque

Ruptured Plaque

High Lp-PLA₂



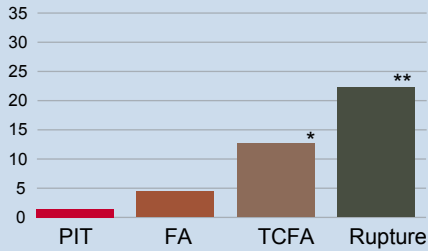
Site of plaque rupture

Thrombus

If the amount of Lp-PLA₂ is high, the plaque is more likely to rupture through the inside lining of the artery into the bloodstream, leading to a dangerous blood clot that could result in heart attack or stroke¹

Lp-PLA₂ levels increase with plaque progression¹

% Lp-PLA₂ staining in varying coronary plaque morphologies

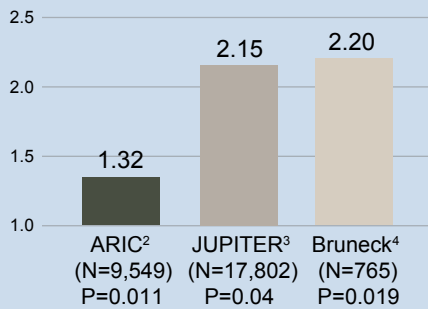


PIT = pathologic intimal thickening
FA = fibroatheroma
TCFA = thin-cap fibroatheroma

*P<0.05 vs FA or PIT
**P<0.05 vs TCFA, FA and PIT

The higher the level of Lp-PLA₂, the higher the risk for a CV event – even with normal LDL

Coronary and CV event hazard ratios



Fully adjusted for traditional risk factors

- Kolodgie FD, Burke AP, Skorija KS, et al. Lipoprotein-associated phospholipase A2 protein expression in the natural progression of human coronary atherosclerosis. *Arterioscler Thromb Vasc Biol.* 2006;26(11):2523-2529.
- Hoogeveen, R., et al. Lipoprotein-Associated Phospholipase A2 Activity and Risk for Coronary Heart Disease and Stroke: The ARIC Study. *ATVB* 2011.
- Ridker, P. M., et al. Relationship of lipoprotein-associated phospholipase A(2) mass and activity with incident vascular events among primary prevention patients allocated to placebo or to statin therapy: an analysis from the JUPITER trial. *Clin Chem* 2012;58(5): 877-886.
- Tsimikas, S., et al. Lipoprotein-associated phospholipase A2 activity, ferritin levels, metabolic syndrome, and 10-year cardiovascular and non-cardiovascular mortality: results from the Bruneck study. *Eur Heart J.* 2009;30(1): 107-115.
- Falk E, Shah PK, Fuster V. Coronary plaque disruption. *Circulation.* 1995; 92:657-671.
- Sachdeva A, Cannon CP, Deedwania PC, et al. *Am Heart J.* 2009; 157(1):111-117.e2.
- Data on file.
- 3rd Annual American Society for Preventative Cardiology Cardiovascular Disease Prevention Conference, 2015. Symposium of REGARDS Lp-PLA2 Substudy.

DIAZYME LABORATORIES

PLAC[®] TEST FOR Lp-PLA₂

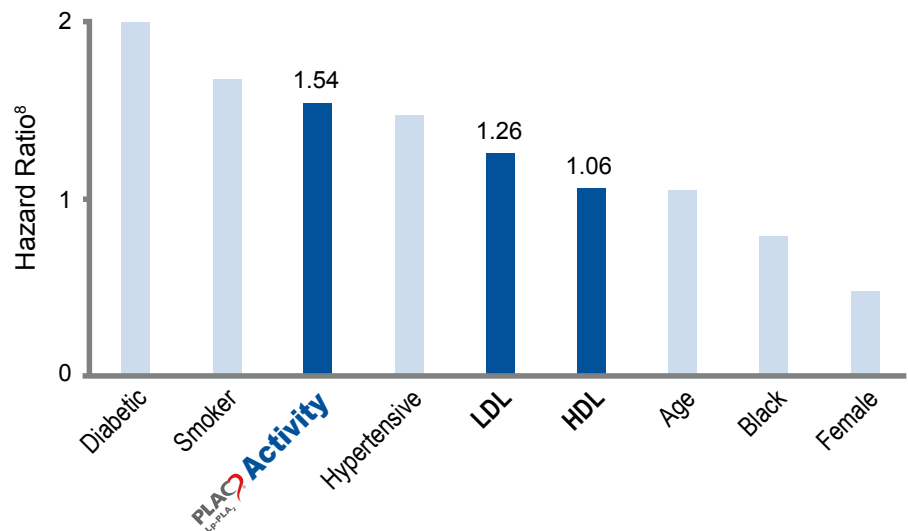
ASSOCIATION OF LP-PLA₂ AND CARDIOVASCULAR EVENTS

Coronary atherosclerosis is by far the most frequent cause of ischemic heart disease, and plaque disruption with superimposed thrombosis is the main cause of the acute coronary syndromes of unstable angina, myocardial infarction and sudden death.²

In a large cohort of patients hospitalized with coronary artery disease events, nearly 50% had admission LDL levels less than 100 mg/dL.⁶

The PLAC[®] Test for Lp-PLA₂ Activity is a strong and independent risk factor.

HR BY RISK FACTOR⁷



In a REGARDS multicenter sub study, high Lp-PLA₂ Activity was more closely associated with outcome than high LDL and low HDL. Only status of diabetes or smoking was more closely associated with events.⁸

Ask your Diazyme Representative for information on the PLAC[®] Test for Lp-PLA₂ Activity for your practice.

DIAZYME LABORATORIES, INC.

12889 Gregg Court, Poway, CA 92064

PO Box 85608, San Diego, CA 92186

Tel: 858-455-4768 888-DIAZYME

www.diazyme.com sales@diazyme.com

