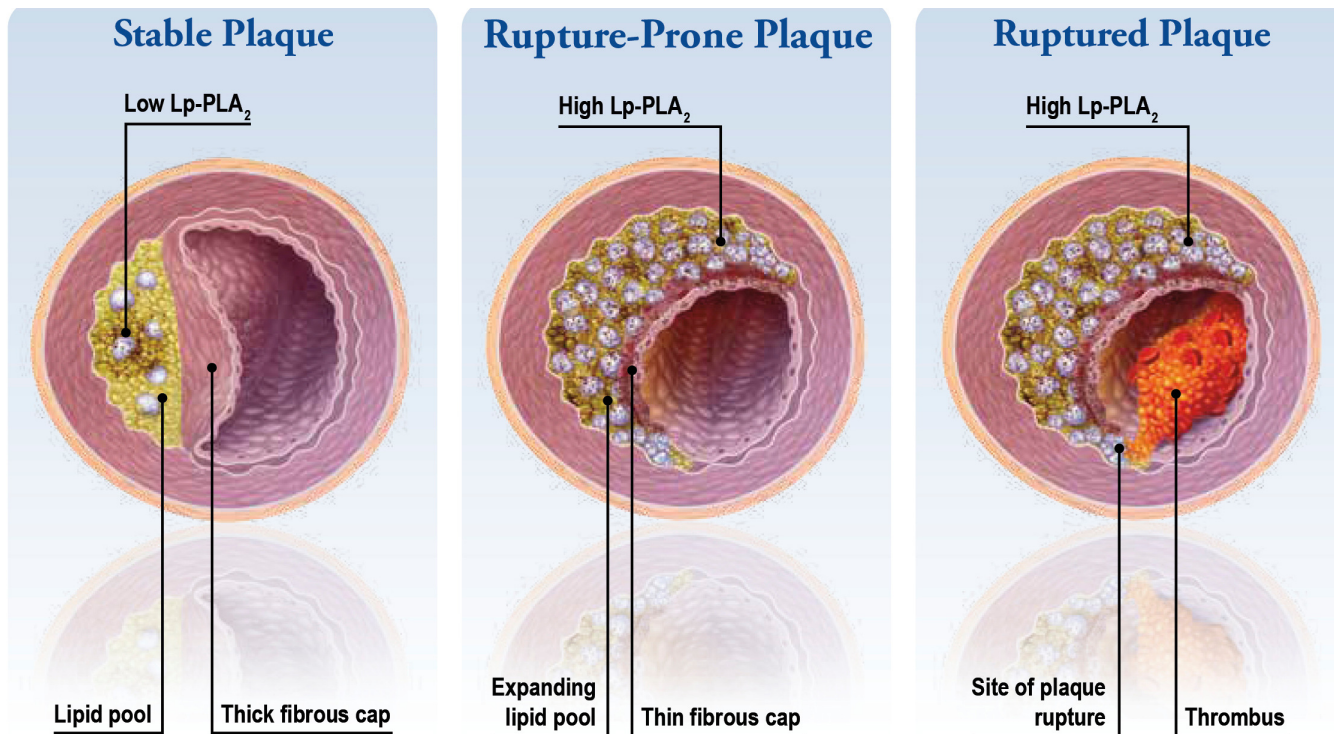


# PLAC Test (Lp-PLA<sub>2</sub>)

## Risk Assessment for Stroke and Heart Attack

**Lp-PLA<sub>2</sub>** – A vascular specific inflammatory marker that detects rupture-prone plaque. High levels of Lp-PLA<sub>2</sub> indicate plaque that rupture and cause dangerous blood clots.



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

When arterial walls become inflamed, the enzyme Lp-PLA<sub>2</sub> is produced within the plaque

If the amount of Lp-PLA<sub>2</sub> 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 stroke<sup>1</sup>

## Coronary Heart Disease Tests

### Inflammation Assays

Lp-PLA<sub>2</sub>  
Fibrinogen  
Homocysteine  
HsCRP  
Myeloperoxidase\*

### Lipid Assays

APO A-1  
APO B  
Cholesterol  
HDL  
LDL  
Lp(a)  
Triglycerides

\*For Research Use Only

Applications Available for Clinical Chemistry Analyzers

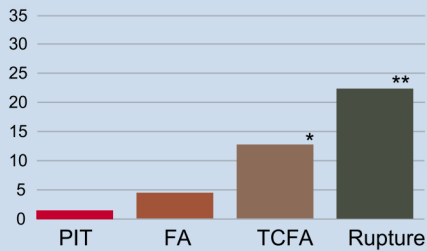


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## Lp-PLA<sub>2</sub> levels increase with plaque progression<sup>1</sup>

% Lp-PLA<sub>2</sub> staining in varying coronary plaque morphologies

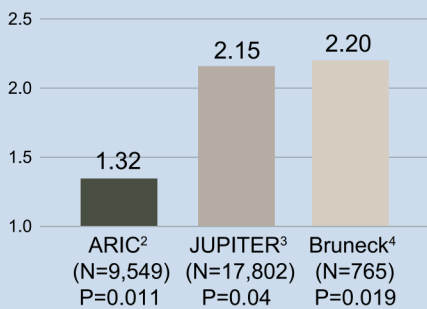


PIT = pathologic intimal thickening  
FA = fibroatheroma  
TCFA = thin-cap fibroatheroma

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

## The higher the level of Lp-PLA<sub>2</sub>, the higher the risk for a CV event – even with normal LDL

Coronary and CV event hazard ratios



Fully adjusted for traditional risk factors



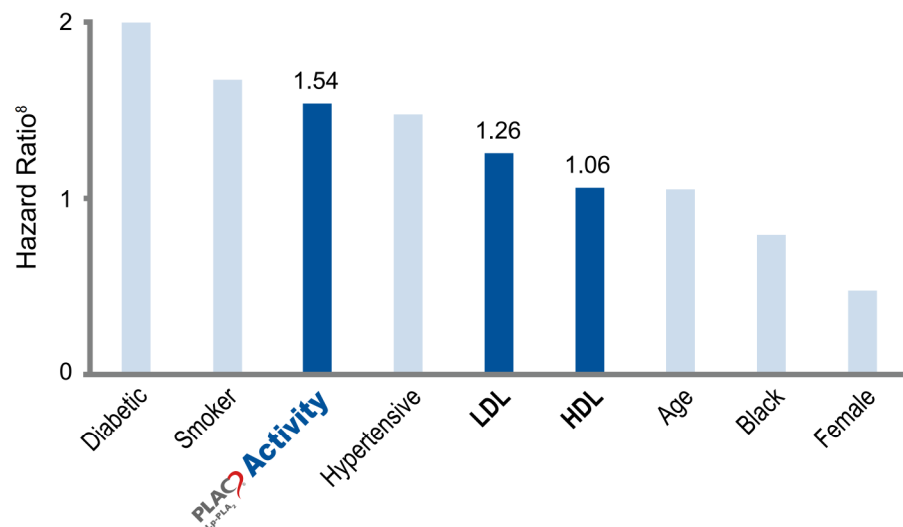
## ASSOCIATION OF LP-PLA<sub>2</sub> AND CARDIOVASCULAR EVENTS

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.<sup>2,7</sup>

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

The PLAC<sup>®</sup> Test for Lp-PLA<sub>2</sub> Activity is a strong and independent risk factor.

## HR BY RISK FACTOR<sup>7</sup>



In a REGARDS multicenter sub study, high Lp-PLA<sub>2</sub> 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.<sup>8</sup>

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3. 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.
4. 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.
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6. Sachdeva A, Cannon CP, Deedwania PC, et al. *Am Heart J.* 2009; 157(1):111-117.e2.
7. Data on file.
8. 3rd Annual American Society for Preventative Cardiology Cardiovascular Disease Prevention Conference, 2015. Symposium of REGARDS Lp-PLA2 Substudy.

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