

A possible risk group for statin use

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In a patient study of over 1,000 individuals with coronary artery disease (CAD), researchers have found that high levels of an enzyme called PLTP significantly increased the risk of heart attack in the subset of patients taking statins. While follow-up studies will be needed to tease out the exact connection between PLTP and statins, this connection does suggest levels of PLTP in the blood should be a consideration for potential statin treatment.

PLTP (phospholipid transferprotein) is involved in the metabolism of cholesterol-containing molecules like LDL and HDL, and therefore has been associated with atherosclerosis and heart disease. The exact role of [PLTP](#) in cardiovascular health remains debated, though, so Axel Schlitt and colleagues measured PLTP levels in 1,085 patients with [CAD](#) and then tracked how PLTP related to clinical outcome.

During the follow-up period (~5.1 years), 156 of the trial subjects suffered a fatal or non-fatal [heart attack](#), including 47 individuals who were taking statins (out of 395 total statin patients). The researchers found that in this statin subset, PLTP levels were a significant predictor of cardiovascular outcome. In the total cohort, PLTP levels and outcome were not associated.

So while the statin patients experienced a lower overall rate of heart attack (12% vs. 15% -though the researchers note it's not especially significant, statistically), some individuals taking these drugs are at higher risk than normal. Schlitt and colleagues hypothesize that the high PLTP levels may blunt the beneficial effects of statins, though additional

studies will certainly be needed.

More information: *Journal of Lipid Research*, "Phospholipid Transfer Protein Activity is a Risk Factor for subsequent Cardiovascular Events in [Coronary Artery Disease](#) Patients under Statin Therapy: the AtheroGene Study" by Axel Schlitt, Stefan Blankenberg, Christoph Bickel, Karl J. Lackner, Gunnar H. Heine, Michael Buerke, Karl Werdan, Lars Maegdefessel, Uwe Raaz, Hans J. Rupprecht, Munzel T, Xian-Cheng Jiang
www.jlr.org/cgi/content/abstract/M800414-JLR200v1

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