When statins aren't enough: New trial drug points to better management of coronary heart disease

Despite widespread use of cholesterol-lowering drugs, a significant number of cardiac patients continue to suffer heart attacks and stroke. Researchers theorize that high levels of an enzyme found in coronary plaques may be to blame, by making plaques more likely to rupture and block blood flow. The drug darapladib may offer a way to fight that risk, according to new research led by the University of Pennsylvania School of Medicine.

Researchers at the Penn and several other international sites have found that the drug may be a useful adjunct to treatment with statin drugs. The new findings, published in a recent issue of the *Journal of the American College of Cardiology*, show that the drug safely and effectively lowers the activity of Lp-PLA2, an enzyme associated with inflammation activity and an increased risk for heart attack and stroke.

The trial results pave the way for an important addition to the drugs doctors use to treat heart disease, says the study's lead author, Emile R. Mohler, MD, Director of Vascular Medicine and Associate Professor of Medicine at Penn.

"This is an exciting new area of medical treatment for cardiovascular disease," Mohler says. "It is hoped that this drug will stabilize artery plaque and prevent heart attack and stroke."

The drug was tested at three different dosage levels in about 1,000 patients with coronary heart disease already taking a cholesterol-lowering statin drug. Among patients taking 160 mg of darapladib each day during the 12-week study, blood tests revealed a decrease in two important circulating biomarkers, suggesting a possible reduction in systemic inflammatory burden.

While the drug doesn't necessarily act to shrink the plaques that build inside coronary arteries and choke off blood supply to the heart, Mohler says the research suggests that darapladib may reduce plaque inflammation and therefore lower rates of clot formation and heart attacks among patients with coronary heart disease.

Source: University of Pennsylvania School of Medicine