VASCULAR DISEASE

**NO ADDED BENEFIT OF
NIACIN WITH STATINS**

The addition of niacin to simvastatin therapy improves LDL-cholesterol, HDL-cholesterol, and triglyceride levels, but shows no incremental clinical benefit in patients with established cardiovascular disease. These data, from the AIM-HIGH trial, were presented at the 2011 AHA Scientific Sessions and published in the *New England Journal of Medicine*.

Researchers randomly assigned 3,414 patients aged ≥ 45 years and with documented stable coronary heart disease, cerebrovascular or carotid disease, or peripheral artery disease to one of the two treatment groups. All patients received simvastatin (40–80 mg daily), plus ezetimibe (10 mg daily) if required to maintain an LDL-cholesterol level of 40–80 mg/dl, and either extended-release niacin (1,500–2,000 mg daily) or a matched placebo. The primary end point was the first event of the composite of death from coronary heart disease, nonfatal myocardial infarction, ischemic stroke, hospitalization for an acute coronary syndrome, or symptom-driven coronary or cerebral revascularization.

At 2-year follow-up, niacin therapy significantly lowered the median LDL-cholesterol level (from 74 mg/dl to 62 mg/dl), increased the median HDL-cholesterol level (from 35 mg/dl to 42 mg/dl), and reduced the median triglyceride level (from 164 mg/dl to 122 mg/dl), compared with placebo. The primary end point occurred in 16.4% and 16.2% of patients in the niacin and placebo groups, respectively (HR 1.02, 95% CI 0.87–1.21, $P=0.79$); the trial was stopped after a mean follow-up period of 3 years because of a lack of efficacy in the active-treatment group.

Although niacin supplementation showed no incremental clinical benefit when added to statin therapy in patients with atherosclerotic cardiovascular disease and an LDL-cholesterol level <70 mg/dl, despite the improvements in both HDL-cholesterol and triglyceride levels, the authors point out that any potential benefit in other populations of patients (for example, high-risk cardiac patients or those whose LDL-cholesterol levels are not intensively controlled with statins) has not yet been prospectively studied.

Gregory B. Lim

Original article The AIM-HIGH Investigators. Niacin in patients with low HDL cholesterol levels receiving intensive statin therapy. *N. Engl. J. Med.* doi:10.1056/NEJMoa1107579