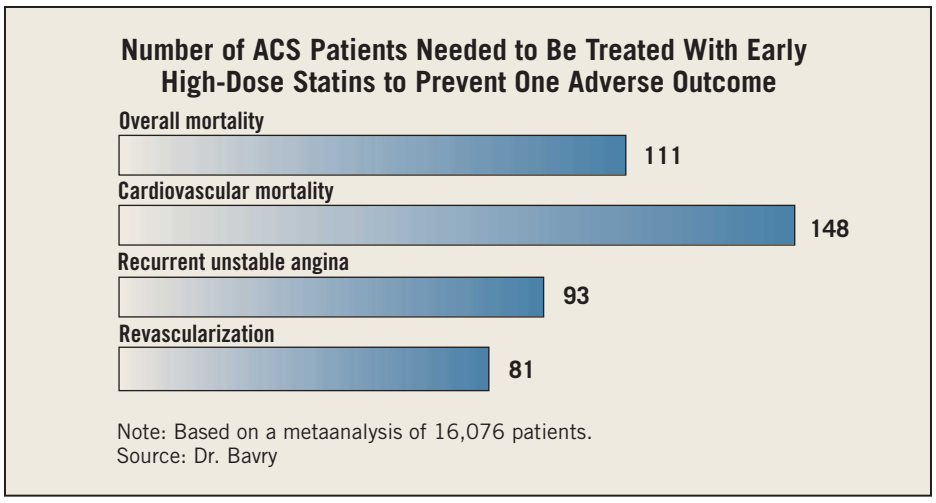

ELSEVIER GLOBAL MEDICAL NEWS

Aggressive Use of Statins Lowers Post-ACS Mortality

BY BRUCE JANCIN
Denver Bureau

CHICAGO — Initiating high-dose statin therapy during hospitalization for an acute coronary syndrome brings significant survival benefit, Dr. Anthony A. Bavry said at the annual meeting of the Society for Cardiovascular Angiography and Interventions.

His metaanalysis of nine randomized clinical trials totalling 16,076 ACS patients showed that in-hospital initiation of high-dose statin therapy saved one life for every 111 patients treated for 15 months, which he termed a favorable number-needed-to-treat ratio. (See box.)

In addition to the observed 22% relative risk reduction in all-cause mortality—the primary end point in the metaanalysis—early, aggressive statin therapy also resulted in highly significant reductions of 25% for cardiovascular mortality, 16% for subsequent unstable angina, and 9% for surgical or percutaneous coronary revascularization procedures, said Dr. Bavry of the Cleveland Clinic Foundation.

In addition, there were favorable, albeit statistically nonsignificant, trends for fewer strokes, MIs, and cardiac arrests in the aggressive statin treatment group.

The metaanalysis was restricted to studies in which ACS patients were randomized to in-hospital initiation of maximal- or near-maximal–dose statin therapy or to a more conservative approach involving lower-dose statins or placebo.

If anything, the relative risk reductions with early, aggressive statin treatment found in the metaanalysis underestimate the true benefits in ACS patients, according to Dr. Bavry. That's because one of the largest trials included in the metaanalysis—the PROVE-IT (Pravastatin or Atorvastatin Evaluation and Infection Therapy) trial—featured 40 mg/day of pravastatin in the control arm, which would have been considered aggressive therapy in several of the other studies.

PROVE-IT was one of three atorvastatin trials totalling 7,200 ACS patients included in the metaanalysis. Trials of aggressive simvastatin and pravastatin were also featured. No significant differences in the benefits of aggressive statin therapy were noted based upon the specific statin used, he said.

At first glance, Dr. Bavry's metaanalysis would seem to conflict with the findings of a recently published metaanalysis led by investigators at the Basel (Switzerland) Institute for Clinical Epidemiology (JAMA 2006;295:2046-56). That study found no significant benefit in the composite end point of death, MI, and stroke at 4 months in more than 13,000 ACS patients enrolled in 12 randomized trials, some of which were also included in Dr. Bavry's metaanalysis.

The explanation for the divergent results may be that follow-up in the Swiss study wasn't long enough. At 4 months, the metaanalysis showed a nonsignificant 7% relative risk reduction in the combined end point in the aggressive statin treatment group. Similarly, Dr. Bavry's metaanalysis also showed nonsignificant trends in individual cardiac outcomes early on favoring aggressive statin therapy; the benefits achieved statistical significance starting only at the 6-month mark.

Dr. Bavry's metaanalysis was awarded first prize as the outstanding original study presented at the SCAI meeting. ■