Impact of abciximab on mortality and reinfarction in patients with acute ST-segment elevation myocardial infarction treated with primary stenting.

Abstract: To combine data from all randomized trials of abciximab versus placebo or open-label control in patients with STEMI treated with primary stenting to assess the short-term and long-term mortality, reinfarction, and bleeding complications. Clinical trials of adjunctive abciximab therapy in patients with ST-segment elevation myocardial infarction (STEMI) undergoing primary stenting have produced conflicting results. Formal searches of electronic databases (Medline, Cochrane) from January 1990 to April 2009 were performed. Five trials randomizing 2,937 patients (1,475 in the abciximab group, 1,462 in the placebo group) were included in the analysis. When compared with placebo, abciximab was not associated with a significant reduction in the odds of 30-day (OR 0.71, 95% CI: 0.45-1.14, P = 0.16) or long-term (OR 0.85, 95% CI: 0.48-1.50, P = 0.57) mortality. Similarly, the rate of reinfarction was not statistically different at 30 days (OR 0.59, 95% CI: 0.30-1.17, P = 0.13) or at long-term follow-up (OR 0.67; 95% CI: 0.39-1.16, P = 0.16). However, when trials with upstream use of thienopyridines were excluded, abciximab was associated with a significant reduction in the composite of death or reinfarction at 30 days (OR 0.45; 95% CI: 0.26-0.77, P = 0.004) but not at long-term follow-up (OR 0.59; 95% CI: 0.27-1.28, P = 0.18). Routine use of abciximab in
patients with STEMI treated with primary stenting may reduce short-term rates of death or reinfarction in patients not administered preprocedural thienopyridine therapy, but does not appear to be beneficial in those who receive preprocedural thienopyridines.