Abciximab in patients with acute coronary syndromes undergoing percutaneous coronary intervention after clopidogrel pretreatment: the ISAR-REACT 2 randomized trial.

CONTEXT: No specifically designed studies have addressed the role of the glycoprotein IIb/IIIa inhibitor abciximab in patients with non-ST-segment elevation acute coronary syndromes (ACS) undergoing percutaneous coronary intervention (PCI) after pretreatment with 600 mg of clopidogrel. OBJECTIVE: To assess whether abciximab is associated with clinical benefit in high-risk patients with ACS undergoing PCI after pretreatment with 600 mg of clopidogrel. DESIGN, SETTING, AND PATIENTS: International, multicenter, randomized, double-blind, placebo-controlled study conducted from March 2003 through December 2005, enrolling 2022 patients (mean age, 66 years) with non-ST-segment elevation ACS undergoing PCI. INTERVENTIONS: Patients were assigned to receive either abciximab (0.25 mg/kg of body weight bolus, followed by a 0.125-microg/kg per minute [maximum, 10 microg/min] infusion for 12 hours, plus heparin, 70 U/kg of body weight) or placebo (placebo bolus and infusion of 12 hours, plus heparin bolus, 140 U/kg). All patients received clopidogrel, 600 mg, at least 2 hours prior to the procedure, as well as 500 mg of oral or intravenous aspirin. MAIN OUTCOME MEASURES: The primary end point was a composite of death,
myocardial infarction, or urgent target vessel revascularization occurring within 30 days after randomization; secondary end points were rates of in-hospital major and minor bleeding. RESULTS: Of 2022 patients enrolled, 1012 were assigned to abciximab and 1010 to placebo. The primary end point was reached in 90 patients (8.9%) assigned to abciximab vs 120 patients (11.9%) assigned to placebo, a 25% reduction in risk with abciximab (relative risk [RR], 0.75; 95% CI, 0.58-0.97; P = .03). Among patients without an elevated troponin level, there was no difference in the incidence of primary end point events between the abciximab group (23/499 patients [4.6%]) and the placebo group (22/474 patients [4.6%]) (RR, 0.99; 95% CI, 0.56-1.76; P = .98), whereas among patients with an elevated troponin level, the incidence of events was significantly lower in the abciximab group (67/513 patients [13.1%]) compared with the placebo group (98/536 patients [18.3%]), which corresponds to an RR of 0.71 (95% CI, 0.54-0.95; P = .02) (P = .07 for interaction). There were no significant differences between the 2 groups regarding the risk of major and minor bleeding as well as need for transfusion. CONCLUSIONS: Abciximab reduces the risk of adverse events in patients with non-ST-segment elevation ACS undergoing PCI after pretreatment with 600 mg of clopidogrel. The benefits provided by abciximab appear to be confined to patients presenting with an elevated troponin level. TRIAL REGISTRATION: ClinicalTrials.gov Identifier: NCT00133003.