

# Circulation

JOURNAL OF THE AMERICAN HEART ASSOCIATION



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*Circulation* 2006;114;589-

DOI: 10.1161/CIRCULATIONAHA.106.638544

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 72514

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## Letter by Poston Regarding Article, "Effect of Clopidogrel Premedication in Off-Pump Cardiac Surgery: Are We Forfeiting the Benefits of Reduced Hemorrhagic Sequelae?"

To the Editor:

The study by Kapetanakis et al<sup>1</sup> is a timely report concerning an increasingly frequent problem for those taking care of cardiac surgical patients. The investigators convincingly show that the avoidance of cardiopulmonary bypass does not reduce the well-established impact of clopidogrel on the need for reexploration after coronary artery bypass graft surgery (CABG). This outcome is not surprising. Although transfusion requirements are indeed consistently reduced by off-pump CABG, reexploration is primarily a function of the bleeding rate. Multiple randomized clinical trials, including a meta-analysis, have shown no significant difference in bleeding rates or in the need for reexploration of on- versus off-pump CABG.<sup>2</sup> Given that clopidogrel has been shown to increase reexploration rates during on-pump CABG, it was not surprising that off-pump CABG did not alter this outcome. The distinction between bleeding and transfusion risk after a given procedure must be made to accurately predict the risk of reexploration for bleeding.

The authors<sup>1</sup> outlined the data from the cardiology literature establishing that perioperative clopidogrel is here to stay. Changes in the way surgeons manage these patients other than just performing the procedure off pump need to be considered. Intraoperative use of aprotinin has been shown in 2 recent randomized trials to reduce bleeding rates in patients treated with clopidogrel.<sup>3,4</sup> The safety of aprotinin use during off-pump CABG has also recently been demonstrated.<sup>5</sup> In addition, platelet-function monitoring in the perioperative period elucidates the wide variation in the antiplatelet effect of clopidogrel. These data could be used to provide a more rational basis for deciding when platelet function has recovered enough after a clopidogrel load-

ing dose to avoid excessive bleeding. In addition, randomized clinical trials support the efficacy of transfusion algorithms based on point-of-care platelet-function monitoring. These are just 2 of many perioperative tools that are widely available to help manage the off-pump CABG patient at high risk for bleeding.

## Disclosures

Dr Poston has a research grant from Bayer Pharmaceuticals.

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