Reviewer’s report

Title: Impact of Percutaneous Coronary Intervention on Biomarker Levels in Patients in the Subacute Phase Following Myocardial Infarction. The Occluded Artery Trial (OAT) Biomarker Ancillary Study.

Version: 3 Date: 17 May 2013

Reviewer: Geoffrey D Barnes

Reviewer’s report:

This report is a substudy of the randomized OAT trial, which compared clinical outcomes in patients receiving mechanical reperfusion vs medical therapy between 24hrs and 28 days post-infarct. In this substudy, relevant biomarkers were monitored at baseline (prior to randomization) and at 1 year in 62 of the 2131 originally randomized patients. The main finding is that most of the biomarkers had a significant change over the 1 year follow up period, including a significant decline in NT-proBNP. These findings were consistent in both the reperfused and medically managed patients.

This is an interesting study, however limited by the small number of patients from only 12 of the original sites. The purpose and clinical question is well characterized and the methods of statistical analysis appear appropriate. The manuscript is well written and the authors appropriately address the strengths and limitations of the study.

Minor Essential Revisions:
- I recommend defining IRA before the abbreviation is used to describe the Infarct Related Artery. This occurs in the background of the abstract, once in the discussion’s first paragraph and twice in the concluding paragraph.
- I recommend defining the terms PCI and MED in the 2nd figure as well.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests