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: 23 May 2013

Reviewer: Karol Miszalski-Jamka

Reviewer’s report:

The manuscript entitled „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” sought to assess potential impact of opening of infarct related artery on the plasma levels of biomarkers related to LV remodeling, stress and fibrosis.

The study demonstrated that the plasma levels of biomarkers have changed significantly during one year follow-up after MI. However, opening of occluded infarct related artery vs optimal medical therapy alone had no significant effect on biomarkers level dynamics.

The study is interesting, original and important. The manuscript is well written.

A. Major compulsory revisions: none

B. Minor essential revisions:

1. Abstract, Methods/Results – please provide information about randomization and number of patients in intervention/control arms in this substudy. Reader unfamiliar with OAT trial should know from abstract that patients have been randomized to intervention or optimal medical therapy alone.

2. Abstract, Results – age 60.8+/-8.8 years instead of age 60.8+/-8.8

3. Results - Data on left ventricular ejection fraction is provided at baseline only. Please report LV ejection fraction at follow-up.

4. Table 1; Table 2 and Figure 2 – please report p-value to the nearest thousandth only

5. Some abbreviations are not explained with first use (IRA, PCI, SD, MED)

C. Discretionary revisions:

1. Apart from LVEF the determination of at least EDVI/ESVI or LVEDD/LVESD at baseline and at follow-up might be helpful in the assessment of the magnitude of LV remodeling process (if available WMSI and determination of LV sphericity index should also be reported). Please discuss briefly EF and LV remodeling parameters change from baseline to one-year, especially possible differences between two arms (PCI vs MED). The study population could be further divided into two subgroups depending on the presence of significant LV remodeling and
then biomarkers levels in these subgroups could be compared.

2. Some data are reported as means and standard deviations, some data are reported as medians and interquartile ranges. The authors should consider choosing one system (preferably medians and interquartile ranges in this study). It will provide much greater uniformity.

**Level of interest:** An article of outstanding merit and interest in its field

**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