Reviewer’s report

Title: Serum Protein Profiles Reflect Coronary Artery Disease in Symptomatic Patients Referred for Coronary Angiography

Version: 3 Date: 29 June 2012

Reviewer: Jaume Marrugat

Reviewer’s report:

Major revisions

This manuscript explores the cross-sectional relationship of a large number of potential biomarkers -measured with sound methods- of coronary artery atherosclerotic lesions requiring intervention (i.e., PCI). One key point here is why the authors have not calculated the CAD/CV risk for these patients. Were these patients referred for coronary angiography free of past history of CAD events, beyond the symptoms that led them to the catheterization lab?

One reason for the authors not providing the CAD/CV risk may be the fact that many lipid profile data is missing in near 50% of participants.

These points need clarification.

In addition the AUC and specificities for a fixed sensitivity of approx. 95%. The best AUC is 84%. In my view, and according to AHA recommendations the effect biomarkers should be tested when added to the risk function (typically that developed by the Framingham Heart Study) in terms of reclassification and improvement of AUC. I understand that the authors address the prediction of coronary artery lesions requiring PCI in symptomatic patients, but adding this information would greatly improve the message of the manuscript given the fact that patients were referred to cath lab for symptoms suggestive of CAD but without previous diagnosis of CAD event. Therefore we are here confronted with primary prevention: in this scenario risk function use is mandatory in my opinion.

Minor Revisions

1) P-values should be described as <0.05, <0.01, <0.001 etc and not as power of 10

2) The authors may wish to change the units of some biomarkers to prevent more than 5 or 6 significant digits on table 2.

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests