Reviewer’s report

Title: Implication of Plasma Intermedin Levels In Patients Who Underwent First-time Diagnostic Coronary Angiography

Version: 2
Date: 5 October 2014
Reviewer: Francesca Giordana

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Major Compulsory Revisions:
1) The study aims to investigate the role of Intermedina (IMD) as a biomarker to discriminate patients with coronary artery disease (CAD) and predict those with severe disease who require early and intensive therapeutic intervention. The Authors enrolled 238 patients who underwent first-time coronary investigation and found that circulating plasma IMD levels in patients with CAD were significantly higher than those in patients without CAD. The introduction and the methods sections are well written and appropriate; as the Intermedin is expressed primarily in the pituitary and gastrointestinal tracts, you should have previously screened the patients for neurological and gastro-intestinal disease, as it could influence the results.

2) As also other clinical conditions besides CAD could increase the IMD levels, please provide echocardiographic data and the differences among the groups in left ventricular hypertrophy, left ventricular ejection fraction, chronic obstructive pulmonary disease, glomerular filtration rate, peripheral vascular disease. Please add to the laboratory features the C-reactive protein, as a marker of inflammatory status. Regarding the cut off values of IMD predicting CAD, I suggest to explicit their accuracy in the results section.

3) The discussion section is adequately supported by the data and balanced quite well. Please provide any potential clinical implications of your findings. Moreover, Authors suggest that plasma IMD levels correlate with Gensini and SYNTAX scores, even though the correlation between IMD-Syntax score is quite poor ($r=0.29$). How do you explain it? Please explicit in the Discussion section.

4) The writing is acceptable, however the syntax need to be generally improved: for example change the second sentences of the first paragraph in the abstract section in “Elevated plasma IMD levels have been demonstrated to correlate with the severity of coronary stenosis in patients with acute coronary syndromes. So far, no human study has examined the role of IMD in stable patients who underwent diagnostic coronary angiography.”

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

Quality of written English: Needs some language corrections before being
published

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