Reviewer’s report

Title: Full B-type natriuretic peptide trumps other prognostic markers in patients assessed for coronary disease

Version: 0 Date: 30 Jan 2019

Reviewer: Alberto Palazzuoli

Reviewer's report:

In the current observational analysis, Authors investigated the role of BNP in risk assessment for patients with suspected CAD. They found that BNP measurement adds some information with respect to the traditional Risk score suggesting that subjects with higher level may be suitable for a more intensive management. The results are interesting and in line with some previous studies, although the paper lacks some important details that need to be addressed to support the conclusion.

1- First of all, authors should perform an analysis comparing their score with more applied algorithm such as Grace score or Duke score providing a better performance in outcome prediction.

2- It’s not enough clear which is the mechanism of BNP increase in CAD: systolic dysfunction secondary to myocardial ischemia? Hybernating myocardium? Ischemic insult per se? Authors in the discussion should describe all this aspect reporting previous published paper in this setting (Redfors B et al B-Type Natriuretic Peptide Assessment in Patients Undergoing Revascularization for Left Main Coronary Artery Disease Circulation 2018; Zürcher S et al Delayed release of brain natriuretic peptide to identify myocardial ischaemia. Eur J clin Invest 2015; Palazzuoli A et al Rise and fall of B-type natriuretic peptide levels in patients with coronary artery disease and normal left ventricular function after cardiac revascularization Cor Artery Dis 2006)


4- Because in current sample size most of patients were asymptomatic, It could be interesting to show data about stress test before angiography and BNP levels to establish whether ischemia and angina threshold are related to BNP increase.
5- Looking at the results, I saw that 40% of patients with BNP level above the median value had systolic impairment. Thus, I think that data may be analyzed matching for EF cutoff more or less than 50%

Minor comments

some figures appear redundant and may be simply described in the text (Figure 4, online fig 4 and 5) Otherwise a Table describing angiographic findings with respect of Risk factor CRP and BNP levels should be added (in line with the advices above)

Reference list lacks of several published papers explaining the mechanism of BNP raise. please insert

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Unable to assess

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

no

Statement on potential review bias
Please complete a statement on potential review bias, considering the following questions:

1. Did you co-author any publication with an author of this manuscript in the last 5 years?

2. Are you currently or recently affiliated at the same institution as an author of this manuscript?

If you can answer no to all of the above, write 'I declare that I did not publish with these authors in the last 5 years and also meet the affiliation criteria". If your reply is yes to any, please give details below.

no

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments
which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal