Reviewer’s report

Title: N-terminal pro-brain natriuretic peptide levels had an independent and added ability in the evaluation of all-cause mortality in older Chinese patients with atrial fibrillation

Version: 0 Date: 19 Oct 2018

Reviewer: Bert Vaes

Reviewer's report:

Rereview: N-terminal pro-brain natriuretic peptide had an independent and added ability in prognostic evaluation of Chinese older patients with atrial fibrillation

Shihui Fu et al.

This study investigated whether N-terminal pro-brain natriuretic peptide (NT-proBNP) significantly improved mortality prediction in older Chinese patients with AF when added to CHADS2 and CHADS-VASc scores. The paper improved a bit after the correction made by the authors. However, I still think the paper needs improvements before it could be published.

1. In your answer to my first question it is still not clear to me why the CHADS2 and CHA2DS2VASc scores need to be improved.

2. In your answer to my question 4, you stated that you added this information in the manuscript. However, I did not find a change in your text in that sense. Did I miss something?

3. Answer to question 5: I understand correctly that CHF is 'congestive heart failure', not 'chronic heart failure'? Because in your definition you speak of long-term symptoms and signs? So people with acute heart failure were excluded? In the table you still used EF<40%.

4. I'm afraid your answer to question 6 is very blurry to me. As I stated above the rationale of your study is still not clear to me. Why all-cause mortality? Why the CHADS2 and CHA2DS2VASc scores need to be improved? And here you state they do not need improvement for stroke prediction, but they do for mortality prediction?

5. You report that most the patients died of multiple organ failure. When one out of four patients died of multiple organ failure during follow-up it seems we are dealing with a severely ill population? When performing risk prediction we want to identify a risk population that might benefit from an intervention that lowers the risk. What kind of
interventions could help to prevent multiple organ failure? That CHADS2 and CHA2DS2VASc scores give the risk to develop a stroke in people with AF, and to prevent AF we can give anticoagulants. But I do not immediately see how you can translate this to death due to multiple organ failure?

6. I disagree that you cannot calculate NRI and IDI at this time.

7. I understand this correctly that 100% of your study population received anticoagulation? This sentence is unclear to me. What kind of anticoagulation? Warfarin? DOAC?

8. The implication for practice is still unclear for me.

9. What is 'nearly no' study? Is there a study or not?

10. I would not mention results in the methods section.

11. I would mention the coefficient of variation in the methods section.

12. You stated language editing was done, but I do not notice any changes in this perspective?

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.

No

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 am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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