Author’s response to reviews

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

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Response letter
Dear editors:

On behalf of my co-authors, we thank you very much for giving us an opportunity to revise our manuscript. We appreciate the editors and reviewers very much for their positive and constructive comments and suggestions on our manuscript entitled "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".

Those comments and suggestions are all valuable and very helpful for us to revise and improve our paper, as well as very important to direct our researches. We have studied those comments carefully and tried our best to revise the paper. Attached please find the revised version, which we would like to submit for your kind consideration.
Reviewer 1

1. The work is well done, and most revisions have addressed my original concerns. However, details of the model based on NT-proBNP levels are still needed. I see the model includes age, hemoglobin (presumably hemoglobin level), FBG (presumably FBG level), GFR (presumably GFR levels) and NT-proBNP (presumably NT-proBNP level). It remains unclear how these measures are incorporated into a single value for each patient. Did you simply add together the age and each level to arise at a value according to this model? Are the particular measures differentially weighted in the model? Alternatively, is some sort of point system used, as is done for CHADS2 and CHA2DS2VASc? Please include details on how each measure is incorporated into a single value for each patient.

Thank you very much for your valuable suggestion. We are very sorry for our unclear description. What you said is very valuable and helpful for us to improve our paper. The current analysis applied Cox regression analysis to select the variables independently associated with mortality to form a model based on NT-proBNP. As shown in Table 2, hazard ratios of different variables were obtained in the current analysis. They can be applied to form a formula with these variables as the coefficients to make a prognostic evaluation. If these variables were transformed into categorical variables, Cox regression analysis could be reused to select the variables independently associated with mortality to form a point system based on NT-proBNP. They can be applied to form a point system with these variables as the points. However, due to a lack of validation from large-scale studies, it may be impossible to determine the formula and point system now. In the future study, we will make a validation through large-scale study and report the formula and point system when they have been confirm to be valid. Under your guidance, we made the corresponding modification in our manuscript.

Reviewer 2

1. The paper has improved a lot. What is the difference between persistent and permanent AF? I thought this was the same?

Thank you very much for your valuable suggestion. We are very sorry for our unclear description. The types of AF were added in the current analysis under the guidance of one reviewer (What about type of AF, e.g. paroxysmal vs persistent vs permanent) and in accordance with AF guideline (Kirchhof P, et al. 2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS. Eur Heart J. 2016;37(38):2893-2962.). Paroxysmal AF was self-terminating, in most cases within 48 hours. and in some cases up to 7 days. AF episodes that were cardioverted...
within 7 days should be considered paroxysmal AF. Persistent AF last longer than 7 days, including episodes that were terminated by cardioversion, either with drugs or by direct current cardioversion, after 7 days or more. Permanent AF was diagnosed when AF was accepted by the patient (and physician), and rhythm control interventions were not pursued in these patients. Under your guidance, we added the diagnostic criteria in our manuscript.

2. There is a difference between anticoagulants and anti-platelets, this should be split up.

Thank you very much for your valuable suggestion. We are very sorry for our unclear description. What you said is very valuable and helpful for us to improve our paper. Under your guidance, we split anticoagulants and anti-platelets in our manuscript.

We have to apologize for giving you so many troubles because of confusing statements and other problems. We deeply appreciate your consideration and suggestions of our manuscript and look forward to receiving your comments. Your comments and suggestions give us not only the great help in revising the article, but also the significant revelation in our scientific research. Your kind guidance is our good luck. We wonder if the modification could meet your requirements. If you have any queries, please don’t hesitate to contact us.

Thank you and best regards.