Author’s response to reviews

Title: The Interaction Effects between TLR4 and MMP9 Gene Polymorphisms Contribute to Aortic Aneurysm Risk in a Chinese Han Population

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The Interaction Effects between TLR4 and MMP9 Gene Polymorphisms Contribute to Aortic Aneurysm Risk in a Chinese Han Population

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BMC Cardiovascular Disorders

Dear editor,

Thank you for giving us a chance to revise our article. The editor and reviewers gave constructive suggestions which are all valuable and very helpful for revising and improving our paper. We have revised all the problems raised by the editor. According to suggestion of reviewers, we have also made correction which we hope meet with approval. Revised portion have been marked in red in the revised manuscript. The main corrections in the paper and the responds to the reviewers’ comments are attached below. Thank you very much for your work and kind consideration.
Yours sincerely,

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Reviewer reports:

Yanwen Qin (Reviewer 1):

1. "...The controls were recruited from the physical examination center of our hospital with both age and gender matched to the patients" What method is used to match?

   Answer: Thank you for your precious question. The frequency matching criteria between case and control groups were based on gender and age (±5 years). If an individual in the control group has the same gender with case and neither the age differences between the control and case are more than five years, the individual can be matched to AA case. We have added related statements into the “Methods-Study population” section.

2. The reasons why you considered diabetes and dyslipidemia" as conventional confounding factors for AAA should be presented in the manuscript.

   Answer: Thanks sincerely for your valuable suggestion. Within your guidance, we have presented the reasons why we considered diabetes and dyslipidemia as possible confounding factors in the background of our revised manuscript. There are several confounding factors associated with AA, including age, gender, hypertension and dyslipidemia [1, 2]. As for diabetes, whether it has a protective or risk effect on AA is far from definitive [3, 4]. In our evaluation of the interactions between TLR4 and MMP9 polymorphisms in susceptibility to AA and its subtypes, we adjusted the potential confounding factors, including age, gender, hypertension, diabetes and dyslipidemia, which were also adjusted in other similar studies concerning interaction analysis of gene polymorphisms in AA risk [5, 6].

References


Reviewer 2 (Reviewer 2): "REVISION ASSESSMENT FROM THE ACADEMIC PEER REVIEWER:

Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? Yes

Reviewer comments: The Authors substantially addressed my comments, in particular introducing a multiple testing correction; regarding my advice to test for more SNPs, the Authors did not increase the number of tested SNPs perform it, but added a specific comment in the Discussion."

Answer: Thanks sincerely for your professional comments. Yes, we should increase the number of tested SNPs. However, increasing the number of tested SNPs involves SNP selection, genotyping and statistical analysis, which is a relatively complex process and requires a lot of time and work. For now, please forgive us for not adding the number of tested SNPs, comprehensive studies involving more functional SNPs should be conducted to perform a multiple testing correction in the future. As one of limitations, we have discussed this point in our revised manuscript.