Author's response to reviews

Title: Differential associations of central and brachial blood pressure with carotid atherosclerosis and microvascular complications in patients with Type 2 diabetes

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Author's response to reviews: see over
Response to reviewer’s comments

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Differential associations of central and brachial blood pressure with carotid atherosclerosis and microvascular complications in patients with Type 2 diabetes
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Dear Editor of Cardiovascular Disorders

I would like to express my deep gratitude to the editor for giving opportunity of reevaluation of this article.
I am also grateful to reviewers, who read and gave us helpful comments and advice for this article.
We revised the manuscript according to the reviewers’ comments.
We are now resubmitting a revised manuscript (with changes marked in red coloured text) along with detailed response to reviewers’ comments.
Also we attach the ‘English Proofreading Certification’.
We would appreciate very much if you could review it for publication.
Thank you.

Sincerely yours,
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I am really grateful for your insightful comments. I revised the manuscript according to your comment.

1. In table 6, were age and gender included in the regression model? Although these factors are not significantly related with DN or DR in correlation analysis, they need to be included in the regression analysis because of their nature of clinically basic factor.
   Reply: We fully agree your opinion. We reviewed thoroughly what you pointed out. We reanalyzed multivariate logistic regression model after including age and gender as independent variables. Thereafter final results were shown in table 6. In addition, we’re very sorry for our mistake. We made a mistake in writing subtitle. We changed from (1) diabetic retinopathy as independent variable to (1) diabetic nephropathy as dependent variable. Also, we changed from (2) diabetic nephropathy ad independent variable to (2) diabetic retinopathy as dependent variable. We revised table 6 overall, although main key findings are unaltered.

2. In table 6, description about (1) and (2) should be changed with using dependent variable instead of using independent variable.
   Reply: As mentioned above, we revised descriptions about (1) and (2) in table 6. Thank you for your kind comment.

3. In table 3 and 4, adding information about microalbuminuria (absolute level or stage of DN) can be aid in clarifying the relationship.
   Reply: Thank you for your good comment. As your comment, we added information about stage of diabetic nephropathy (no albuminuria, microalbuminuria, overt proteinuria) in Results, Table 3 and 4.

4. In table 3 and 4, unit of factors need to be inserted.
   Reply: We’re sorry for the mistake. We inserted missing units of factors.

5. English need to be more refined.
   Reply: We revised this manuscript overall by an English native language speaker. We attach ‘English Proofreading Certification’. We hope that this manuscript is improved
I am really grateful for your insightful comments. I did my best to revise the manuscript according to your points.

**Major compulsory revisions**

1. The English is poor. The authors need to give their paper to an English native speaker to improve the language. In present form I find it very difficult to read.
   
   **Reply**: Thank you for your recommendation. Our manuscript was proofread by an English native language speaker. We attach ‘English Proofreading Certification’. We hope that this manuscript is improved to read.

2. There are several mistakes in Tables, e.g. missing or incorrect units.
   
   **Reply**: We’re very sorry for our mistakes. We reviewed carefully all tables. We corrected incorrect units and inserted missing units in Tables.

3. In table 6, I miss information about which covariates where included in the analysis.
   
   **Reply**: We described this information in Result section (page 10)

4. Figure 1-it is well known that central and brachial SBP are highly correlated. What new information this figure adds? Besides, there is an incorrect caption.
   
   **Reply**: We agree your opinion. We particularly want to emphasize that central BP components and brachial BP components show the differential associations with microangiopathies or surrogate marker of macroangiopathies although agreement of central BP and brachial BP was very strong.
   
   We corrected an incorrect caption as you pointed out.

**Minor essential revisions**

1. The authors need to pay close attention to the preparation of manuscript. There are some sentences starting with small letter, some paranthesis without spaces before them, in tables some lines started with small, some with capital letters.
   
   **Reply**: Thank you for your kind comment. We rechecked thoroughly our original manuscript and found several mistakes as you pointed out above. We revised incorrect descriptions and standardized spelling rule.
2. Provide information about quality of arterial measurement (intra or interobserver variability).

   Reply: Thank you for good comment. In our study, the measurements of blood pressure were performed twice by the same trained observer in same day at intervals of at least one minute. We’re afraid we can’t provide information about observer variability. We described this point in Methods section.

   Thank you very much. I hope it answered all your comments.