Author’s response to reviews

Title: Association of circulating CEACAM1 levels and insulin sensitivity in gestational diabetes mellitus

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Author’s response to reviews:

Cover letter

Dear Editor:

Our manuscript has been extensively revised in accordance with your comments. All changes in manuscripts emphasized by red characters.

Responses to the comments of Editor

1. Power: This needs to be based on pre study assumption and giving us the power of the current study based on the current sample size

Answers:

We are sincerely appreciative of this constructive comment. According to the editor’s advice, we have calculated the power of our study. As stated in the manuscripts, based on a previous study, the SD of CEACAM1 in healthy persons was 109.7pg/ml. In our study, 140 subjects including 70 GDM and 70 normal glucose tolerance pregnant subjects were enrolled. Using the current sample, to detect a 55pg/ml difference with a significance level of 0.05 in GDM and NGT group, the power was 82.3% (α=0.05), therefore, the sample size was considered to be adequate.

2. Fig 1 is not needed.
Answers:

Thanks for editor’s reminder. We have deleted Figure 1 in our manuscripts.

3. The associations are not adjusted for important confounders, so it needs be stated clearly that this is unadjusted analysis.

Answers:

We appreciate the insightful comments made by editor. According to the editor’s instruction, we have performed correlation analysis between CEACAM1 and GDM with adjustment of age and gestational age and stated clearly in our paper.

4. The conclusion need to show the direction of correlation and make it clear that unadjusted.

Answers:

We thank for editor’s reminder. As editor’s advice, we have revised and stated clearly as “we found a significant positively correlation between CEACAM1 and insulin sensitivity after adjustment of age and gestational age in GDM group” in the conclusion section.

5. If the authors want to proceed with these conclusions, then consult biostatistican and include adjusted analysis.

Answers:

We sincerely appreciate reviewer’s constructive and thought-provoking comments. As to editor’s advice, we have re-analyzed and conducted adjusted analysis when controlling for age and stated our findings in the paper.

6. Big issues with numerical formatting (i.e. no spaces). Round decimals up to 2 points.

Answers:

According to reviewer’s advice, we have revised formatting problems and changed the value as 2 digits after the decimal point in the tables.

6. Copyedit of language.

Answers:

According to reviewer’s advice, we have invited native English speaker to entirely revise the manuscript.
7. No references in background section that give rationale to study CEACAM1 and GDM. Address this major concern.

Answers:

We thank for reviewer’s reminder. According to reviewer’s suggestion, we have added the citations in background section. Also, we have discussed the reason of our study on CEACAM1 and GDM in the manuscript. So far, the fundamental pathogenesis of GDM have not been clearly understood. IR is a well-documented hallmark of GDM. CEACAM1 may improve IR by clearance of insulin in the liver. Regarding this, we hypothesize that CEACAM1 may play a protective role in the occurrence and development of GDM.

8. Lack of references in the second half of the discussion. What has happened here? Include and discuss better.

Answers:

We thank for reviewer’s advice. As editor’s suggestion, we have added the references in the second half of the discussion section and discussed our findings in details in the text.

9. Inconsistencies with formatting in references.

Answers:

We are sincerely appreciative of editor’s reminder. According to reviewer’s suggestion, we have revised the formatting of references in the manuscript to make them keep consistent.