Author’s response to reviews

Title: Serum Vaspin Concentration in Elderly Patients with Type 2 Diabetes Mellitus and Macrovascular Complications

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Author’s response to reviews:

Dear Editor,

Thank you very much for your decision letter and advice on our manuscript (Manuscript # BEND-D-17-00023) entitled “Serum Vaspin Concentration in Elderly Patients with Type 2 Diabetes Mellitus and Macrovascular Complications”. We also thank the reviewers for the constructive and positive comments and suggestions. Accordingly, we have revised the manuscript. All amendments are highlighted in red in the revised manuscript. In addition, point-by-point responses to the comments are listed below this letter.

This revised manuscript has been edited and proofread by Medjaden Bioscience Limited.

We hope that the revision is acceptable for publication in your journal.

We look forward to hearing from you soon.
First of all, we would like to express our sincere gratitude to the reviewers for their constructive and positive comments.

Replies to Reviewer 1

1. Please develop the Introduction as a hypothesis rather than as a purely descriptive study
Response: We have revised the whole Background section, accordingly. (Page 2, Line 55-96)

2. Authors should provide detailed methodology for measuring biochemical parameters. The inter and intra assay coefficients of variation for measuring biochemical parameters like serum vaspin/insulin should be provided and this important considering the variations in the assessment.
Response: We have added relevant information, accordingly. (Page 8, Line 149-167)

3. How were the healthy controls recruited? Did they undergo an oral glucose tolerance test to rule out diabetes or pre-diabetes?
Response: Healthy controls were recruited from the clinic of the Geriatric and Endocrine Department. All participants underwent the OGTT test and had normal glucose tolerance. We added this information, accordingly. (Page 6, Line 114-116)
4. As this is not a prospective study, kindly avoid the term "baseline characteristics" instead you can use clinical characteristics of study participants

Response: We replaced “baseline characteristics” with “clinical characteristics” throughout the manuscript. (Page 9, Line 189; Page 25, Line 487)

5. What is the standard criterion used to define obesity?

Response: We analyzed BMI directly instead of analyzing obesity defined according to BMI. Therefore, we did not define obesity for our analysis. (Page 8, Line 142-143)

6. Why the correlation analysis has been done only on Control and T2DM group alone (Table 3). It would be better to include T2DM+MC group also

Response: We would clarify that the T2DM group in Table 3 actually consisted of both T2DM with and without MC patients. We have clarified this in the table. (Page 28, Table 3)

7. Mention the antidiabetic medication effect on vaspin levels

Response: We have discussed the impact of anti-diabetic medication on vaspin levels. (Page 14, Line 286-287; Page 15, Line 304-310)

8. Discussion should be more relevant to the results

Response: We have revised the Discussion section thoroughly, making it more relevant to the results. (Page 12, Line 241-350)
9. The authors should explain the clinical significance of their study.

Response: We have added an “Implication for clinical practice” section in the revised manuscript. (Page 16, Line 334-339)

10. It will be helpful if summary and conclusion focuses more on the further studies that can understand the underlying mechanisms and how this study's results can help in setting up more physiological and prospective studies

Response: We have added an “Implication for future research” section and highlighted this in the Conclusion section. (Page 16-17, Line 340-346)

Replies to Reviewer 2

Specific Comments:

1. In the background section, lines 70-72 does not have supporting reference provided. Kindly provide reference for the following sentence - 'Diabetes mellitus has placed a heavy burden on society and in the economic development of the country.'


2. Line 80 on page 5 mentions 'Hida et al. [9] found that ..' However reference 9 does not have this author name mentioned. Kindly cross check the references and make the changes.

3. The patient selection has failed to describe on how the sample size was achieved. Kindly add few lines describing the sample size calculation.

Response: We estimated the sample size to ensure sufficient power in the analysis of variance. Based on a previous study [14-16], the mean (standard deviation) of vaspin in the control, TM and TM+MC groups were 368.5 (11.8), 572.4 (22.4) and 167.4 (25.4), respectively. In order to achieve 90% power with a significance level of 0.05, 62 participants in each group are needed. This information has been added in the revised manuscript. (Page 7, Line 135-140)


5. The exclusion criteria mentions that participants with 'no history of tumor' were excluded from the study. Does this mean that cancer patients were also part of the study?

Response: We apologize for the writing mistake. The excluded participants should be those with a “history of tumor”. This has been corrected, accordingly. (Page 7, Line 130)

6. The HOMA-IR equation mentioned in line 152 should include the units of measurement wherein: HOMA-IR = FPG (mmol/L)*FINS (µU/L)/22.5.

Response: The units have been added, accordingly. (Page 9, Line 166-167)

7. There is a discrepancy noted in the number of male (M) and female (F) participants mentioned in the results section (M= 150 and F=80) and in table 1(F= 150 and M=80). Kindly rectify the error made.
Response: We apologize for the writing mistake. The correct description is M=150 and F=80. These have been revised, accordingly. (Page 9, 24 Line 188, Table1)

8. From table 1 it is evident that the average body mass index (BMI) of the elderly patients with T2DM and/or MC was above 26 and is a clear indicator of overweight/obesity. Was BMI also used as an inclusion criterion or were most of the T2DM elderly participants overweight?

Response: We did not include the participants by any criteria regarding BMI. The high level of BMI found in our study may be due to the patients being recruited from our Endocrine Department, where most patients tend to have a problem on overweight or obesity. (Page 6, Line 117-124)

9. The significant p values depicted in tables can be denoted with * symbol. Kindly add the symbol wherever significant and add a footnote indicating the same.

Response: The revised manuscript has been modified, accordingly (Page 24, Table 1).

10. Figure 1 can have the values depicted in the graph to add clarity. Also the spelling of vaspin concentrayion needs to be changed to vaspin concentration.

Response: The revised manuscript has been modified, accordingly.

11. The discussion section is too elaborative and needs to be cut down.

Response: We have removed irrelevant content in this section and focused more on the discussion of the results. (Page 12-17, Line 241-350)
12. This section should include a paragraph on advantages and limitations of the study.
Response: Details have been added, accordingly. (Page 15, Line 316-333)

13. The references needs to be formatted and arranged in order of the text. For example:


The above reference nos. 9 and 13 have the titles mentioned in brackets. Also,

c. Line nos. 262 and 271 have Nese et al. [22] and Youn et al. [26] where the reference numbers do not match the author names mentioned.

Kindly check and make the corrections throughout the article.
Response: We have re-formatted the references and kept their format consistent.