Reviewer’s report

Title: Association between plasma adipsin level and mild cognitive impairment in Chinese patients with type 2 diabetes: a cross-sectional study

Version: 1 Date: 12 Aug 2019

Reviewer: Georgia Argyrakopoulou

Reviewer's report:

The authors conducted a cross sectional study that tried to compare adipsin levels in a group of individuals with type 2 diabetes, with and without mild cognitive impairment (MCI). It is an overall good study that draws important clinical correlations of the aforementioned adipocytokine and MCI in people with type 2 diabetes. The etiological correlation of the assumption made is not clear and the authors state that in the text.

Minor revision comments are included in the following:

Page 7: Line 42. The term "healthy controls" does some seem appropriate to the second group of patients with DM but without MCI.

Page 8: Line 9. e.g should be substituted with i.e. otherwise detailed explaination of exclusion criteria should be described.

Page 8: Line 12."Serious hearing and vision disorder can't complete the neurological evaluation". This sentence needs correction.

Page 8: Line 48. Fatty liver measurement via ultrasound was done and was not significant when the two groups were compared (table 1). Within the MCI patients with diabetes, was fatty liver correlated with increased levels of adipsin?

Page 9: Line 10. "The individuals were tested face-to-face by experienced neurologists who were blinded to the research design, a series of neuropsychological tests were conducted consist of ……" This sentence needs correction.

Page 10: Line 12. The authors state they performed two duplicates of measurement of each sample. Does that mean each sample was measured 4 times?

Page 11: Line 45. "T2DM patients with MCI tended to have poorer cognitive performance than healthy controls (all p<0.05)." Why is a "trend" described when p value is <0.05?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal