Reviewer’s report

Title: Plasma nesfatin-1 level is associated with severity of depression in Chinese depressive patients

Version: 0 Date: 30 Dec 2017

Reviewer: Yasin Bez

Reviewer’s report:

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Dear Editor and Authors,

I have read the manuscript throughly. This is a straightforward study compared nesfatin-1 levels of depressive patients with those of control subjects. Findings are consistent with the literature and contributing our understanding of relationship between depression and a candidate biomarker for it. I encourage its publication however I have some important comments before it can be accepted for publication.

1. No need to provide p values in the abstract, they can be removed.

2. Abstract first sentence should also include "depression" which is the main topic in this study. Currently it refers only to anxiety and stress.

3. Background first sentence: revise to "...cognition, and behavior."

4. Methods: Please provide time frame of the patient recruitment.

5. Methods: Please move description of HAMD-17 scale under measurements section, introduce it in detail and also provide reference for validity and reliability of Chinese version of HAMD-17.

6. Methods: It is unclear in which group you classified the patients who scored 7 on HAMD-17. I guess it should be ≤ where it is described in the manuscript?

7. Methods: Did you exclude patients with known diagnosis of diabetes mellitus or thyroid disease?

8. Results: First sentence, give gender distribution within parenthesis. Such as "...119 depressive patients (...male, ....female)...") and "32 healthy individuals (...male, ...female)."
9. Results: No need to provide p values in the third sentence, they are already available in Table 1.

10. Results: Forth sentence, move the mean HAMD-17 scores to the end of the sentence. Such as "...than that in the control group (18.9 ± 8.3 in depressive group vs. 4.2 ± 0.9 in control group, \(p<0.001\))."

11. Results: Throughout the manuscript there are some instances HAMD-17 is missing its 17, please revise.

12. Results: What does "...independently negative factors for plasma nesfatin-1 level.." or "...independently positive factors..." mean? Regression models are predictive analyses that are used to explain the relationship between one dependent variable and one or more independent variable. Please revise this sentence scientifically appropriate.

12. Discussion: Reference for the first sentence (reference number 12) is a negative study showed decreased plasma nesfatin-1 level in GAD patients. Since anxiety and depression are frequent comorbid conditions this literature somewhat argues against author's findings. However, many other studies showed increased plasma nesfatin-1 level in some other anxiety disorders. For their reference I listed 2 examples of those studies below:

http://www.tandfonline.com/doi/pdf/10.1080/10177833.2010.11790674

http://www.tandfonline.com/doi/pdf/10.5455/bcp.20110627110925

First sentence also needs a reference to a study that investigated nesfatin-1 in depression.

13. Discussion: Last 2 sentences of second paragraph needs also similar revision which is raised in comment #12 above. What does "...positive relationship." or "...independent positive factor..." mean? Please use appropriate scientific language.

14. Discussion: "This increased trend indicates that plasma nesfatin-1 is associated with severity of depression". This is a highly assertive sentence. I would recommend a modest one like "This increased trend suggests that plasma nesfatin-1 is associated with severity of depression".

15. Discussion: An interpretation adjustment is needed for another sentence, if authors agree they can revise that sentence to "Therefore, the plasma nesfatin-1 level may be considered as a biomarker to identify Chinese patients who have severe depression."

16. Entire manuscript needs language editing by a native English speaker, especially the conclusion paragraph.

17. Table 1: As a general rule tables should be self explanatory without any reference to any part of the manuscript. Therefore, mark gender with an asterix and define it as Chi-square as a footnote. Also it would be reader friendly if you list the study group first in the second column.
and the control group in the third column. Additionally authors may want to type the significant p values with bold characters (applies also to Table 2).

**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

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