Reviewer’s report

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

Version: 0 Date: 24 Dec 2017

Reviewer: Andreas Stengel

Reviewer’s report:

1. There are numerous spelling and grammar mistakes as well as unusual phrasings. If possible, a native speaker should correct the paper.

2. The authors state "[…] the important role of nesfatin-1 in the pathophysiology of depression […]" without providing a reference. Such a crucial sentence has to be validated by a trustworthy source.

3. Please add information about inclusion/exclusion criteria concerning nesfatin-1 producing gastric P/D1 cells: did any patients have a history of bariatric surgery or gastric/GI-disease of any kind?

4. There are several parameters, that the authors correlated with the severity of depression, namely TSH and T4. Since hypothyroidism could be the reason for the depressive symptoms, all patients with non-normal thyroid lab-values should be checked for pathologies of the thyroid gland and excluded. Only patients with normal thyroid levels should be included. Please evaluate and elaborate the relationships between TSH, T4, Glucose and nesfatin-1 and statistically check for cross-dependence and confounding factors.

5. The authors state an OR of 0.81 between high nesfatin-1 and severe depression. The main point of the paper is a positive correlation between nesfatin-1 and severity of depression, which an OR of 0.81 contradicts. Please explain.

6. Most ELISAs detect NUCB2 as well as nesfatin-1. Did the ELISA used here specifically detect processed nesfatin-1? This may be checked by a Western Blot using the same antibody.

7. Did the authors correct for (prevalent) psychiatric comorbidities such as anxiety disorders known to influence nesfatin-1 levels?

8. Please pay attention to possible sex differences.

9. Do nesfatin-1 levels decrease following the treatment of depression? This should be investigated.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

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

No

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

No

**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.

Not relevant to this manuscript

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

Not suitable for publication unless extensively edited

**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.