Reviewer's report

Title: The association between BDNF Val66Met polymorphism and emotional symptoms after mild traumatic brain injury

Version: 0 Date: 11 Oct 2017

Reviewer: Francesco Carpi

Reviewer's report:

The study by Wang et al. describes the correlation between BDNF rs6265 and depressive symptoms following mTBI, showing a higher risk of depression for female patients with the TT genotype. Although the manuscript is well written, there are several limitations to this study, as the authors state, and there are some points that need to be addressed.

Critical comment:

The authors should specify other characteristics of the recruited patients not only age and gender (e.g. ethnicity, health condition before TBI) because these could strongly influence the findings.

The authors recruited 192 patients, 131 females and 61 males, as described in table 1. These numbers do not match with the ones evaluated at the first week in tables 2,3,4 and 5, in particular:

Table 2, 185 patients evaluated at the first week instead of 192.

Table 3, 187 patients evaluated at the first week instead of 192

Table 4, 127 female patients evaluated at the first week instead of 131

Table 5, 126 female patients evaluated at the first week instead of 131

The authors should explain why they exclude these missing patients.
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.

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.

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