Reviewer's report

Title: Association of brain-derived neurotrophic factor levels and depressive symptoms in young adults with acne vulgaris

Version: 2 Date: 04 Apr 2019

Reviewer: Marc L. Molendijk

Reviewer's report:

In my previous assessment I asked the authors the issues that I express below and to reference the manuscript well. The authors did not do this, so I ask them again [and I do consider this a waste of my, yours and the editors time]. Please use the right references in your paper well. Here some tips how to do that:

- When referring to the mechanisms, please refer to shortcomings of the preclinical research in this field (in introduction and discussion), notably the lack of validity of the animal models used, eg:

  Coping with the forced swim stressor: towards understanding an adaptive mechanism
  Neural Plasticity, 2016 - hindawi.com

  Immobility in the forced swim test is adaptive and does not reflect depression
  Psychoneuroendocrinology, 2015 - Elsevier

- When presenting meta-analytic evidence that depression is associated with low BDNF, do not use the outdated meta-analysis by Sen (ref 15) but an updated one, eg:

  Serum BDNF concentrations as peripheral manifestations of depression: evidence from a systematic review and meta-analyses on 179 associations (N=9484)
  Molecular Psychiatry 2014 - nature.com
- Also, and related, discuss the lack of associations between BDNF and depression (severity) from the largest -longitudinal - cohort on this subject (in introduction and discussion):

Serum levels of brain-derived neurotrophic factor in major depressive disorder: state-trait issues, clinical features and pharmacological treatment

Molecular …, 2011 - nature.com

Chronic depression is associated with a pronounced decrease in serum brain-derived neurotrophic factor over time

Molecular Psychiatry, 2015 - nature.com

- With regard to confounders use and refer the following reference. In theis reference, the importance of storage time and temperature on BDNF is also shown. How was BDNF store in your study and at which temperature. Were there differences between patients and controls?

Determinants of serum brain-derived neurotrophic factor

Psychoneuroendocrinology - …, 2011 - Elsevier
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.

Yes

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:

Needs some language corrections before being published

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