Reviewer’s report

Title: Plasma long non-coding RNA BACE1 as a novel biomarker for diagnosis of Alzheimer disease

Version: 0 Date: 27 Aug 2017

Reviewer: Sylvain Lehmann

Reviewer's report:

General comments

In this manuscript, the authors report small differences in the level of some LncRNA from patients with or without Alzheimer's diseases. The work is very preliminary and need additional information and corrections. The results are also over interpreted.

Specific comments;

- the correlation analyses needs to be performed also on the all populations

- characterisation of patients with MRI/CSF biomarkers will add to the work

- forward and reverse are the same for BC200.

- the AUCs clearly indicate the the biomarkers are not usable or meaningful for AD diagnosis, it is therefore misleading that the indicate a specificity of 88%...

- statistical differences between ROC curve are needed

- validation of the result on an additional independent set of samples is absolutely needed.
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.

I recommend additional statistical review

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

Not suitable for publication unless extensively edited

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