Reviewer’s report

Title: Monitoring candidate gene expression variations before, during and after a first Major Depressive Episode in a 51-year-old man

Version: 1 Date: 13 February 2014

Reviewer: Etienne Sibille

Reviewer’s report:

In this manuscript, Belzeaux et al report on gene changes occurring in blood sample of a subject, before, during and after a major depressive episode. This is a unique perspective on the natural progression of gene changes in correlation with disease state. It provides important insight, but of course it is a single case report, and should therefore be interpreted as such. So the study is anecdotal but interesting.

Major compulsory revision.
- Figure 1 – Did the author run technical replicates for the qPCR experiments? This should provide a standard error for the measurements at the different time points. Otherwise one may wonder whether changes in single time points for four genes out of 10-12 may just reflect normal technical variability.

Minor comment.
- The Conclusion of the abstract is very generic and does not take into consideration the actual results of the current report.
- Introduction – Did the authors have any specific prediction that they tested?
- PBMC needs to be spelled out the first time it is used.
- Please, explain what is “recurrent depressive cognition”?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests