Reviewer’s report

Title: Type specific Real time PCR for detection of human herpes virus 6 in schizophrenia and bipolar patients: a case control study

Version: 3 Date: 31 July 2015

Reviewer: Zongchang Li

Reviewer’s report:

This is an interesting paper that has detected the human herpes virus 6 in schizophrenia and bipolar patients with single type-specific Real time PCR assay. The main aim of the authors was to investigate the association between herpes virus 6 infection and the etiology of schizophrenia and bipolar disorders. However, this paper suffers from some methodological issues that limit enthusiasm for this study.

Major compulsory revisions

Given rare detection rate of HHV-6 virus in the PBMCs (1.5%), a false negative result may be caused due to the small sample size included in this study. The conclusion was not adequately supported by the data and a larger sample size was suggested.

In the laboratory analysis section of the methods (Lines 110-126), were all qPCR assays were carried out in biological replicates? In addition, it stated that “The assay was validated by using a 10-fold dilution series of the positive control”, the number of serial dilution points of standard curves was not reported. This information is important to assess the quality of the assays, please add it.

Minor essential revisions

How were control subjects recruited? If they were being evaluated clinically? If did they have other medical disorders, but just not a history of psychiatric disorders.

In the DNA extraction section of the methods, the author stated “The concentration of extracted DNA was assessed by optical density (OD) 260/280 ratios”. There was a error of this description. The 260/280 ratios was calculated evaluate the DNA purity and the concentration of DNA sample was determined by measuring absorbance at 260 nm.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, and I have assessed the statistics in my report.