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: 24 July 2015

Reviewer: Glenn Konopaske

Reviewer’s report:

Major Compulsory Revisions

1) In the second paragraph of the discussion, the authors state that SITH-1 "causes" mood disorders. Mood disorders are multifactorial. SITH-1 can contribute to the risk of mood disorders, but is unlikely to be the sole cause.

2) In the third paragraph of the discussion, the authors state that the study did not find an association between HHV-6 and "psychiatric disorders." This is untrue, the study did not find an association between HHV-6 and schizophrenia or bipolar disorder.

3) Since there are three groups, independent t-test are inappropriate for the continuous variables. An ANOVA followed by post-hoc comparisons controlling for multiple comparisons (e.g., SNK or Dunnett's) should be done.

Minor Essential Revisions

1) In the first paragraph of the results section, a p-value should be given for inter-group differences in proportions of HHV-6A and -6B positivity.

2) The following sentence in the second paragraph of the discussion is awkward and should be re-phrased: "Nowadays disease association of this virus is increasing..."

3) The following sentence in the conclusion is unintelligible and should be re-phrased: "Huge challenges need to find the pathogenesis..."

4) In the Beta-globin PCR portion of the methods section, the authors state that beta-globin PCR is used to indicate "perfect" nucleic acid extraction. No extraction is perfect. Beta-globin PCR is used to indicate the quality of the extraction and the sample.

Discretionary Revisions

1) Although it is explained in the discussion, it should be made clear why HHV-6A/B was studied in these patients.

2) Were the diagnoses of schizophrenia and bipolar disorder confirmed by SCID? If not, why not?

3) In the first sentence of the statistical analyses section, the authors refer to qualitative variables. These should be termed categorical variables.
4) In the discussion the authors use words such as "proven" and "cause". Such definitive terms should be avoided. Instead phrases such as "associated with", "increases the risk of", "appears to" or "suggests that" would be more appropriate.

**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:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests