Reviewer's report

Title: Potential risk factors associated with human encephalitis: application of canonical correlation analysis

Version: 2 Date: 2 July 2011

Reviewer: William Reisen

Reviewer's report:

Review of revision of BMC 1364451746484500 Hamid et al. Potential risk factors associated with human encephalitis....

Review was hampered by a snafu during downloading of their manuscript during which part of the M&M and the beginning of the R&D sections were missing. However, I presumed these were similar to the original submission and based by review on these combined view of the paper.

Hamid et al. have revised their paper to conclude that intrinsic variables and not extrinsic variables may contribute to the ‘cause’ of encephalitis. This seems to be a justified conclusion because most of the explanatory variables contributed little to CCA and many infectious agents are known to produce encephalitis in only a small percentage of infections [e.g., herpes virus]. The analysis did indicate that some of the explanatory variables may be worthy of future study and that some of the diagnostic variables most frequently were associated with encephalitis disease.

The revision was generally well written. I presume these minor editorial snafus will be addressed during the editing process. However, I found Figs 1 and 2 redundant to Table 2 and Fig. 3 generally not informative because the axes were not labeled and therefore it was difficult to assign the correlations to a specific combinations of x or y variables. Fig 4 provided a nice summary of Table 3.

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:

no competing interests