Reviewer's report

Title: Molecular epidemiology of giardiasis among Orang Asli in Malaysia: application of the triosephosphate isomerase gene

Version: 1 Date: 18 January 2014

Reviewer: Yaoyu Feng

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Giardia duodenalis has been considered the most common protozoa infecting human worldwide. This cross-sectional study was conducted to identify assemblage’s related risk factors of G. duodenalis among Orang Asli in Malaysia. Among stool samples from 611 individuals studied, sixty-two samples (10.2%) were identified as assemblage A and 36 (5.9%) were assemblage B. Further analysis identified the risk factors associated with assemblage A and B infection, respectively.

Major Compulsory Revisions

This is an interesting study and the results provided the practical intervention ways in preventing giardiasis in Orang Asli community. However, all the results were based on triosephosphate isomerase (tpi) gene only. Although the authors stated that the tpi gene was chosen because of the high genetic heterogeneity displayed by Giardia species at this locus at the end of the introduction, it is a common practice for detecting Giardia duodenalis on multiple loci including tpi, beta-giardin and glutamate dehydrogenase in all the recent publications because of the discrepant results based on different loci. Therefore, it is strongly suggested that the authors abided by the standard practice by adding data from the other two loci.

Minor Essential Revisions

Fig 1 is unnecessary

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

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests