Reviewer's report

Title: Published sequences do not support transfer of oseltamivir resistance mutations from avian to human influenza A virus strains

Version: 2  Date: 5 October 2014

Reviewer: You-Hua Chen

Reviewer's report:

Although it is well known now the recombination events in influenza viruses are rare, this study still contribute to the knowledge on the co-evolution of human and avian influenza virus. I think it is interesting and worthy for publication after revisions.

I have the following concerns for the authors to consider:

Major Compulsory Revisions

1, lines 79-80: if possible, please provide a table or appendix to summarize the specimen ID for the human and bird sources for the N1 and N2 genes. Such a summary table could well fit your title "published sequences...".

2, I would suggest the authors to cite some relevant papers on the homogeneous recombination of influenza viruses in the introduction and discussion sections, because I think they represented some of the previous advances that the authors missed:


3, More importantly, I would strongly suggest the authors to provide a table or a density plot to summarize the reports on the p-values from the RDP analysis among the sequences they used.

Also, some more descriptions on these results should be provided in the results
and discussion sections of the main text. These results provided strong supports on your argument that there was no evidence of transfer of OC-resistant mutations from avian virus to human virus. I think these results were the center of your study, but not fully presented. 4, if possible, the phylogenetic trees may be better by providing bootstrapping support values on the internal nodes, although the number of sequences used in the study is too large. Well-supported trees are important in doing the detection of homologenous recombination events.

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

**Quality of written English:** Acceptable

**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