Reviewer's report

Title: Cynomolgus monkeys (Macaca fascicularis) inoculated with Brazilian and Dutch swine HEV strains are successfully infected and exhibit hematological changes

Version: 2 Date: 5 August 2013

Reviewer: Harry HR Dalton

Reviewer's report:

Thank you for asking me to review this paper. I enjoyed reading it.

For me, the most intriguing, and novel, observation is the effect of HEV on the haematological system, and in particular the lymphopenia that the authors have described. The rest of the paper is OK, but the fact that macaques get subclinical hepatitis when challenged with HEV genotype 3, is not new.

Points for the authors to consider:

Major Compulsory Revisions

1. I would like to see more detail about the lymphopenia, and in particular I would like to see a figure which shows the lymphocyte count over time post exposure.
2. Some of the paragraphs extend to more than one page. They are too long, and need to be made shorter. This will make the paper easier to read.
3. There is too much emphasis in the results section on the fact that the macaques get subclinical hepatitis. We already know this, so the authors should consider shortening this section of the results and conclusions, and expanding the bit about lymphopenia.
4. I would like to see a bit more discussion and speculation in the discussion section about the lymphopenia observed. It is a really interesting observation in my view.
5. The quality of the English language used is OK, but sometimes not quite up to the standard one might expect in a major international journal. Having said this, I could not even contemplate trying to write a paper in Portuguese. Perhaps the authors might like to ask a colleague who’s first language is English to help them improve this aspect.

Discretionary Revisions

6. Finally, I am not convinced that the sensitivity and specificity of the serological assays used in the study is up to the mark. I certainly would not have chosen the assays that the authors did. Having said this, the serological results to me are really of minor interest. It is the finding of lymphopenia that interest me most. I do NOT think the authors need to repeat the serology with more sensitive assays.

Thanks for asking me to review your work.
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:

HRD has had travel and accommodation costs and consultancy fees from GlaxoSmithKline and Wantai; consultancy fees from Aptalis; and travel, accommodation and lecture fees from Merck.