Reviewer's report

Title: Inducible nitric oxide synthase (iNOS) is expressed in Dengue-infected patients during acute phase and monocytes infected in vitro

Version: 1 Date: 4 January 2005

Reviewer: ichiro kurane

Reviewer's report:

General
The authors attempted to define the role of NO in dengue virus infection in vitro and in vivo. The objectives of this manuscript are important, and some of the results are interesting. However, there are several main concerns to be addressed, especially inappropriate control in the experiments and the interpretation of the results.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1) How was the viability of cells in infected cell cultures? Dengue virus antigen can be usually detected in one day after infection. Why cells were cultured for 3 days before staining and why only the results on days 3 and 6 are presented?
2) Dengue virus-infected monocytes eventually come off from the plates and die. Is it possible that the decrease in % infected cells was due to detachment or death of infected monocytes?
3) How were the numbers of monocytes in infected and uninfected cultures?
4) In figure 4, the percentage of dengue antigen-positive cells is over 10% in the control. Is this assay well validated? The percent positive cells should be calculated for each sample by the formula: % positive with dengue Ab - % positive with control Ab.
5) This reviewer recognizes that detection of dengue antigen-positive cells in PBMCs in dengue patients is not easy. As far as I know, there have not been any reports that indicated such high levels of dengue Ag-positive cells in PBMCs. It is strongly recommended that the picture of FA staining be shown. Because 50% of monocytes are reported to be dengue Ag-positive in this manuscript, it will be easy to detect positive cells under a fluorescent microscope.
6) In figure 8A, there are no peak of antigen-positive cells. Why there is no dose-response relationship in the effect of SNP in figure 8B?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published
Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.