Reviewer's report

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

Version: 2 Date: 20 June 2005

Reviewer: Eleanor Riley

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Overall, I agree with Perkins that the study should be published.

The comments from Kurane:

Although he is right that there is some non-specific staining in the uninfected cells, the magnitude of the difference between infected and uninfected is so large that I am convinced that DENV is present in monocytes from infected but not uninfected individuals.

The authors have shown very convincing staining of DENV in monocytes by microscopy; that these cells were infected in vitro rather than coming from patients (as requested by the reviewer) is – I think – not really relevant. The microscopy is just to demonstrate that virus is really present in cells that are positive by FACS.

The authors have dealt well with the question of cell viability; virus replication is going to cause some loss of infected cells so the fact that 50% of the cells are dead or dying is inevitable, and again, not relevant.

This is the reviewer asking for extra data that was not requested in the first review and as such is rather unfair. I don’t think it is a critical point.

I don’t understand this point, in both Fig 8 and Fig 9 the % of DENV+ cells is approx 40-50%.

However, there are a few issues of presentation which I would like to see addressed, either by the authors or the editorial staff.

The figures are of rather poor quality – higher resolution images are required (maybe they have just been converted to pdf using low dpi?).

Several of the figures could be combined into multi-panel figures to bring together related sets of data, e.g. Figs 1 and 2; figs 3 and 4; figs 6,7 and 8; figs 9 and 10.

In the figure legends, the authors need to state how many donors were tested in each experiment and how often the experiments have been repeated. i.e. how reproducible are the findings?