Reviewer's report

Title: Evaluation of two formulations of adjuvanted RTS,S malaria vaccine in children aged 3 to 5 years living in a malaria-endemic region of Mozambique: a Phase I/II randomized double-blind bridging trial

Version: 4 Date: 10 September 2006

Reviewer: Anna Durbin

Reviewer's report:

General
The paper reports non-inferiority of a 0.5 mL formulation of the RTS/S adjuvanted malaria vaccine candidate compared with the previously studied 0.25 mL formulation. The doses of antigen and adjuvant are the same in both formulation. The paper is well written but could be improved by expanding on the information provided in the paper. The authors refer the reader to a reference not readily available for a description of the trial site. It would be helpful to include an expanded description of the trial and methods of the trial.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. An expanded description of the trial should be included; inclusion/exclusion criteria, study area etc. It appears from Figure 1 that HepBsAg was measured prior to vaccination but was not part of eligibility criteria. Why were HepBsAg positive subjects enrolled if there data could not be used in the immunogenicity analyses? A description of the assessment of immunogenicity should be expanded to state how serum was diluted prior to analysis. 2. The discussion should be expanded to state what is planned for this vaccine. How do the authors envision this vaccine being incorporated into EPI and what trials are planned to that end.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. In the Methods section describing vaccines, it is unclear whether or not the same dose of vaccine was administered to the two groups. The description of the RTS,S?ASO2A vaccine should be reworded to make clear that the entire 0.5 mL volume contains 50 µg RTS,S such that only 25 µg was administered.

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 importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.