Reviewer's report

Title: Longitudinal monitoring of Ehrlichia ruminantium infection in lambs and kids by pCS20 PCR and MAP1-B ELISA in The Gambia

Version: 1 Date: 5 March 2007

Reviewer: Theo de Waal

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Line 64 – more appropriate reference to the reduced susceptibility of animals to E. ruminantium – the cited references refers mostly to Theileria.

Line 73, 87, 172 – format of citation

Line 102 & 110-111 – there seems to be a discrepancy between the number of animals tested; 76 or 77?

Line 121 – it is not clearly stated if animals were examined at birth (or within 3 days) for ticks as well

Line 123 – reference to preparation and staining of brain smears

Line 140 – indicate 3’ and 5’ end of primer

Line 153 – what about inclusion of negative controls in the PCR assay?

Line 171 – determination of cut off not clear.

Line 203 – The 1 tick collected at Kerr Seringe was a nymph (Table 1)

Line 247 – ELISA test do not detect infection, only exposure to the organism

Line 250- 253 – It is not possible to make this conclusion as animals were not examined for ticks at birth and not all animals were examined. It has been shown that E. ruminantium can be transmitted by ticks 27-38 hours after attachment (Allsopp et al, 2004. Heartwater. In: Infectious Diseases of Livestock 2nd Edition. Ed Coetzer & Tustin; 504-535. See also statement in line 262-264 indicating high tick abundance at the time of animals being born. Not convinced that these results support the occurrence of vertical transmission.

Line 324 – Only 2 of the animals that died of heartwater were positive at birth but only died at age of 22-49 days – therefore does not prove that cause of death was due to parasites transmitted vertically.

Line 328 – why would vertical transmission be protective?

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

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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 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:

'I declare that I have no competing interests'