Reviewer's report

Title: Prospective European-wide multicentre study on a blood based real-time PCR for the diagnosis of acute schistosomiasis

Version: 2 Date: 1 December 2012

Reviewer: Tore Lier

Reviewer's report:

I’ve read the paper ‘Prospective European-wide multicentre study on a blood based real-time PCR for the diagnosis of acute schistosomiasis’ with great interest.

The study introduces new knowledge and a quite new method to help with a sometimes difficult diagnosis. The paper is well written and the language fluent.

Minor Essential Revisions:
In the last part of the paper there is a mix of numbers in brackets, indicating references, and numbers written in superscript. What is that?

Discretionary Revisions:
My main concern was the two study groups. They are not very well defined. Group B are only introduced in the result section. If both groups are to be used, they both could be described in Methods with number of persons, inclusion criteria etc. Presently, it is a bit confusing who goes into which group and why. For example, in the beginning of Results it is stated that ‘Thirty-eight patients fulfilled the case definition. Four of them…had not developed symptoms at the time.’ No fever, either? If so, do they fulfil the case definition, or should they be moved to group B? Further, in Inclusion criteria it is written that ‘In addition, a few patients with high clinical suspect….’ Do you mean the 17 patients in group B?

The authors quite correctly state that ‘The high rate of positive PCR results within the study population may be in part attributed to the fact that the participating centres are well familiar with this otherwise rare disease..’ It is always good to have a clinical diagnosis confirmed, but in such centres and with patients such as in group A, the pre-test probability is so high that you should probably consider it as a positive case, regardless of the result of the PCR. When the case is clinically less clear-cut, as in some of those from group B, the result of the PCR could be more decisive. However, study wise you will then also have a problem with gold standard, how to define a positive case. In Discussion, the authors state that they could exclude active Schistosoma infection in six patients, of whom 50% were suspected due to positive serology. This would benefit from clarification, as a positive serology was considered a positive case in Methods.

The tables list every patient on separate lines. Hence they contain so much information the reader may quickly loose interest. The results in the tables may have benefited from being grouped. However, this is not a major issue.
Good luck!

**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.

**Declaration of competing interests:**

I declare that I have no competing interests.