Reviewer's report

Title: Acute febrile illness and Brucellosis in the Western region of KSA

Version: 3 Date: 9 December 2012

Reviewer: Javier Guitian

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Compulsory revisions

The authors should state their research question more clearly, is the objective to assess the diagnostic techniques? to identify infections? To estimate the % of infections by different Brucella strains?

The methods appear to have been reasonably well described and data appears to be sound, however, I am not an expert in laboratory diagnostics and this element should be checked by another reviewer. I have one concern / request with regard to the methods: it is not totally clear how cases and controls were selected. This must be clearly stated as it is crucial to understand potential biases. The exact procedure by which AFI cases and controls were selected has to be presented: where all cases that fulfil the criteria, seen in hospital from date xxx included? Or only some of them? What about the controls?

The discussion should provide a clear interpretation of the findings, specifically: the results suggest that Brucella infection could be associated to a large % of AFI cases in the Northern region but not in the Central region. How can the very large difference be explained? What are the implications? Also, what are the reasons why a very large proportion of individuals react to both B. abortus and B. melitensis?

Finally, the writing needs some improvements to be acceptable, although the English language is generally OK there some sentences scattered along the paper that have to be rewritten: e.g. “The incidence of febrile illness disadvantaged…”

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