Reviewer's report

Title: Outbreak of viral hemorrhagic fever caused by dengue virus type 3 in Al-Mukalla, Yemen

Version: 1 Date: 11 November 2012

Reviewer: Paolo Ravanini

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MINOR ESSENTIAL REVISIONS:

1. Methods, Laboratory confirmation:
   In the last sentence, the authors write that the samples were tested with RT-PCR for ALKV, RVFV, CHIKV and YFV. The cited article (Drosten et al) describes a method to test for several haemorrhagic fevers, but it doesn’t include ALKV and CHIKV. The authors should indicate how they performed the RT-PCR for ALKV and CHIKV (method used or cited reference).

2. Discussion, second paragraph:
   It is acceptable to write that the presence of IgG positive specimens in more than half of the acute patients (within 7 days after the onset of illness) can suggest a previous exposure to other DENV serotypes, but the authors should emphasize that this doesn’t rule out completely the possibility that these positivities are due to the appearing of a low IgG titre at the end of the first week of illness. To clarify this aspect, it is interesting to know if there are data about the titre of these positivities and the days elapsed after the onset of illness (how many of these positive acute samples were collected in the first few days after the onset).

DISCRETIONARY REVISIONS:

1. Methods, The Outbreak Region:
   This part includes some unnecessary information about the geographical region, which could be replaced by a map figure to shorten the text.

2. Discussion:
   The authors could say if they have in mind to sequence in the near future the two positive samples (or the amplicons) to obtain further phylogenetic and epidemiological information about the virus.

MINOR ISSUES NOT FOR PUBLICATION:

1. Methods, The Outbreak Region:
   The area of the city of Al-Mukalla should be indicated as square km, not simply km.
2. Methods, Laboratory confirmation:

It is not perfectly clear in the text the use of the different primers. The problem can be solved changing this part of the second sentence: “... 1 mM of the 5’ primer D1, D2 and 3’ primer TS1, ...” should be modified to “... 1 mM of the 5’ primer D1 and 3’ primers D2 and TS1, ...” (according to the work by Lanciotti, the D2 primer is a downstream primer, as primers TS1-4 are, while the primer D1 is the unique upstream primer)

Level of interest: An article whose findings are important to those with closely related research interests

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.