Reviewer's report

**Title:** Comparison of two dengue NS1 rapid tests for sensitivity, specificity and relationship to viraemia and antibody responses

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**Reviewer:** Susana Vazquez

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**Manuscript Revision:**

COMPARISON OF TWO DENGUE NS1 RAPID TESTS FOR SENSITIVITY, SPECIFICITY AND RELATIONSHIP TO VIRAEMIA AND ANTIBODY RESPONSES

The authors present a study related with the evaluation of two commercial rapid tests from Bio-Rad NS1 Ag Strip and SD Dengue Duo using a panel of plasma samples from dengue patients with different viral serotypes and viraemia levels. The authors concluded that the NS1 components of each test are specific tools for diagnosing acute dengue, though the sensitivity of both is influenced by the level of viraemia and host humoral immune response.

**Minor Essential Revisions:**

Page 6 paragraph 2: The algorithm used in this study should be described in M & M and not referred in other publication.

Page 6 paragraph 2: The author states that the ELISA test used to detect IgM and IgG was the one defined by Innis et al as IgM and IgG antigen capture ELISA. Please chek it out because I think it is IgM and IgG capture ELISA.

Figure 3 and 4: They are complex and it is not clear how the author establish the difference between NS1 positive and negative. It is necessary to be more explicit to convince.

**Conclusions**

Due to the necessity of an early diagnosis to dengue virus infection is very important to know about the sensitivity and specificity of the different commercial systems in the detection of NS1 protein, in order to assure an early and good diagnosis. These tests evaluated in this study require further prospective evaluations.

I consider that this manuscript may be accepted after minor essential revisions

**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