Reviewer's report

Title: Zika vaccines and therapeutics: landscape analysis and challenges ahead

Version: 0 Date: 03 Jan 2018

Reviewer: Andrew Haddow

Reviewer's report:

To the Authors:

The manuscript entitled: "Zika vaccines and therapeutics: landscape analysis and challenges ahead" by Wilder-Smith et al. is authoritative, concise and well-written. The information and insights provided are of high importance to researchers and public health personnel involved in Zika virus therapeutic and vaccine candidate development/testing/evaluation activities; as well as regulatory agency personnel overseeing these efforts. I have only minor comments/suggestions as noted below.

Sincerely,

Andrew Haddow

Minor comments/suggestions:

"yellow fever (YF), Japanese encephalitis (JE), and Tick-borne Encephalitis (TBE)" should be "yellow fever (YFV), Japanese encephalitis (JEV), and Tick-borne encephalitis (TBEV)". Change throughout the manuscript.

When possible identify the full strain name utilized for either the therapeutic or vaccine candidate: Example: Instead of "ZIKV Puerto Rico strain" state "ZIKV Puerto Rico strain PRVABC59"
Table 1. "Immunogen" column. Should "prME" be "PrM/E"?

Table 2. Improve consistency in terms and style. See examples below.

"Platform" column. "non VLP" should be "non-VLP"; "Live Attenuated Recombinant Virus" should be Live, attenuated recombinant virus; "inactivated virus + aluminum adjuvant" should be "Inactivated virus + aluminum adjuvant"; "peptide" should be "Peptide".

"Antigen" column. Different terms are used for the same antigen (whole virus, zika virus, full genome, whole virion) - choose a single term. "PrM/E protein and PrM/E/NS1" should be "PrM/E and PrM/E/NS1"; "PrME+NS1" should be "PrM/E+NS1"; "prME" should be "PrM/E"; Zika structural proteins which ones?; "prM-E" should be PrM/E; "ZIKA virus PreM and Envelope proteins" should be "PrM and E"; "ZIKV, YF, and CHIKV surface antigens" should be "ZIKV, YFV, and CHIKV surface antigens". Precede all antigen information with "ZIKV" (e.g. ZIKV PrM/E proteins).

"Adjuvant" column. Choose either "Alum" or "Aluminum", consider using Aluminum.

Table 3. "Description" column. Bulleted points either start with a capital letter or without, be consistent throughout.

Author discretionary comments/suggestions:

Use of "The" preceding "WHO" throughout the manuscript (e.g. The WHO…)

Improve consistency utilizing ZIKV structural protein names throughout the manuscript/tables.

Page numbers and continuous line numbering are not utilized.
"spread of the ZIKV on 18 November 2016, the long-term needs for a ZIKV vaccine" consider "…the long-term need for a ZIKV vaccine…"

"Under the Blueprint Plan of Action, WHO has led a series of initiatives to maintain" consider "…led a series of initiatives to maintain…"

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:
Acceptable

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