Author’s response to reviews

Title: Seroprevalence of dengue IgG antibodies among patients and asymptomatic individuals three years after infection during an outbreak in Zhejiang Province, China

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Author’s response to reviews:

Dear Editors and Reviewers,

Thank you for your comments on our manuscript entitled “Seroprevalence of dengue IgG antibodies among patients and asymptomatic individuals three years after infection during an outbreak in Zhejiang Province, China” (INFD-D-17-01171R1). Those comments are all valuable and very helpful for improving our paper. We have studied comments carefully and have made correction which we hope meet with approval. Moreover, we invited an English native speaker to revise the manuscript. All the contributing authors have reviewed the revision and concur in the revised submission.

Respond to Chandima jeewandara (Reviewer 2):

1. Respond to comment: Major comments Previous concerns of the infecting serotype and the primary and secondary nature of infection had not been added to the text in the revised format

Response: We added two sentences in the discussion section.
Furthermore, dengue is not endemic and no dengue outbreak occurred from 1950 to 2012 except
the outbreak in 2009 in the study area. We can concluded that all infecting serotypes were
DENV-3 related to the outbreak in 2009 and all symptomatic persons and asymptomatic
individuals were all primary infection.

2. Respond to comment: Line 17: dengue disease seems inappropriate. Authors may rephrase it
as Dengue

Response: We rephrased it.

3. Respond to comment: Introduction: first paragraph: suggest to include more references. Eg:
although authors claims WHO data no references shown.

Response: We added a reference.

4. Respond to comment: Its difficult to understand the authors justification for its own definition
of dengue case as opposed to adhering to an accepted guideline like WHO criteria

Response: Dengue cases were justified according to Diagnostic criteria for dengue fever (WS
216-2008) of China. We revised these sections and added a reference. Dengue cases are
classified as probable case, clinically diagnosed case or confirmed case. Probable cases are those
diagnosed by local experienced physicians according to cases’ epidemiologic exposure and
clinical manifestations; clinically diagnosed cases are probable cases with positive DENV-
specific IgM antibodies in their serum samples; confirmed cases are clinically diagnosed cases
for which any of the following laboratory results are reported by the local public health
institutes: fourfold or greater increase in DENV-specific IgG antibody titer between paired
samples, or positive DENV polymerase chain reaction (PCR) test, or positive virusisolation and
identification [21].

5. Respond to comment: The selection criteria for asymptomatic individuals not clear. Have you
screened the total population?

Response: We revised relative sentences.

In that study, serum samples were collected from persons who didn’t have medical visit history
from July to September, 2009 and lived in the six villages where dengue outbreak occurred if
they agreed with us. A person with no symptoms and dengue IgM was detected in his serum
specimen was defined as an asymptomatic individual.

6. Respond to comment: Sample detection kit needs proper mentioning in the manuscript with
the county of origin along with criteria for positive, negative and equivocal responses.
Serum samples were tested for dengue specific IgG by Australian Panbio dengue IgG indirect enzyme-linked immunosorbent assay (ELISA). The kits were used according to the manufacturer’s instruction. Panbio units were calculated according to the instruction and > 11 units was defined as a positive result, 9-11 units was defined as a equivocal result, and < 9 units was defined as a negative result.

7. Respond to comment: Data analysis line 9 N need to be non capitalized (non parametric)
Response: We revised it.

8. Respond to comment: Line 56 : Authors need's to have a consistent nomenclature. Do the patient refer to the symptomatic group It should be uniform throughout the manuscript. Authors need to carefully check for the uniformity. Discussion throughout the discussion authors need's to have a consistent nomenclature. Do the patient refer to the symptomatic group. It should be uniform throughout the manuscript. Authors need to carefully check for the uniformity.
Response: We changed all “patient” to “symptomatic persons” throughout the manuscript.

9. Respond to comment: 3rd Paragraph: I would rather feel inappropriate to mention as "To our disappointment"
Response: We revised it.

10. Respond to comment: table needs further formatting
Response: We reformatted the table.

We have tried our best to improve the manuscript and made some changes in the manuscript. We appreciate for Editors/Reviewers’ warm work earnestly, and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestions.

Yours sincerely,

Jimin Sun