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## Problem of presently available diagnostic tests for Zika virus infection: View from Thailand

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Dear Editor,

Zika virus infection is the present global issue due to the finding of occurrence of congenital defect relating to this infection [1,2]. The disease is a dengue-like infection, hence, it is well-known that the missed and under diagnosis is possible [1,2]. However, the big concern is on the reliability of the presently available diagnostic tests for diagnosing Zika virus infection. Here, the authors appraise on previous published data from Thailand. Based on the laboratory data on 7 confirmed cases of Zika virus in Thailand [3], the problem of diagnostic tests can be seen. Focusing on Zika virus IgM, from 4 Zika virus infection cases that Zika virus IgM tests were done, 1 has negative result implying the false negative rate equal to 25%. Focusing on the PCR and plaque reduction neutralization tests, which are the two available gold standards for confirmation of Zika virus infection, the discordance in agreement between the two tests has been found. Of 7 confirmed Zika virus infection cases, 1 case got both PCR and plaque reduction neutralization tests and the discordant result can be seen (negative PCR but positive plaque reduction neutralization tests). Of interest, PCR negative Zika virus infection can also be seen (1 case from 5

cases with PCR results, giving the rate equal to 20%). Based on these data, it can imply that there can still be the under-diagnosis of Zika virus infection although the specific Zika virus tests are available. It is suggested that combined several available tests should be selected in making a diagnosis for a suspicious case of Zika virus infection.

**Conflict of interest statement**

We declare that we have no conflict of interest.

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