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Persistence of Zika Virus in Body Fluids — Final Report

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THE AUTHORS REPLY:

In reply to Sánchez-Montalvá and colleagues: in contrast to dengue, which has a welldefined spectrum of severe disease, most cases of noncongenital ZIKV disease are mild, except for rare complications such as Guillain–Barré syndrome.¹ In the participants in our study, the signs and symptoms were consistent with uncomplicated ZIKV disease. Furthermore, with respect to the duration of detectable ZIKV RNA, we saw no difference between the 35% of participants who were enrolled at outpatient clinics and those who were enrolled at emergency departments (P = 0.22). We agree that it is not known whether humans can be reinfected with ZIKV; however, studies in mice have shown protection from reinfection, including an absence of detectable viremia.² In vitro evidence of antibodydependent enhancement can occur in flaviviruses in the absence of in vivo evidence.³ A study from Colombia showed no evidence of in vivo enhancement of ZIKV in patients with previous dengue virus infection.⁴ Moreover, findings in men from the continental United States, where dengue virus rarely circulates, were similar to those of our study.⁵ Finally, sexual transmission contributes to a small percentage of ZIKV infections and would not affect our findings.

References

- 1. Hills SL, Fischer M, Petersen LR. Epidemiology of Zika virus infection. J Infect Dis 2017;216:Suppl 10:S868–S874. [PubMed: 29267914]
- 2. Turner LH, Kinder JM, Wilburn A, et al. Preconceptual Zika virus asymptomatic infection protects against secondary prenatal infection. PLoS Pathog 2017;13(11):e1006684. [PubMed: 29145516]
- 3. Sariol CA, Nogueira ML, Vasilakis N. A tale of two viruses: does heterologous flavivirus immunity enhance Zika disease? Trends Microbiol 2018;26:186–90. [PubMed: 29122447]
- Terzian ACB, Schanoski AS, Mota MTO, et al. Viral load and cytokine response profile does not support antibody-dependent enhancement in dengue-primed Zika virus-infected patients. Clin Infect Dis 2017;65:1260–5. [PubMed: 29017246]
- 5. Mead PS, Duggal NK, Hook SA, et al. Zika virus shedding in semen of symptomatic infected men. N Engl J Med 2018;378:1377–85. [PubMed: 29641964]

Since publication of their article, the authors report no further potential conflict of interest.