**Reviewer’s report**

**Title:** Seroprevalence and molecular characteristics of varicella-zoster virus infection in Chinese children

**Version:** 0  **Date:** 31 May 2019

**Reviewer:** Vicki Traina Dorge

**Reviewer's report:**

Manuscript INFD-D-19-00727. Seroprevalence and molecular characteristics of varicella zoster virus infection in Chinese children. This manuscript by Luan et al. is a clear, well-written study, assessing VZV seropositivity in both vaccinated and non-vaccinated young kindergarten children, ages 4, 5 and 6, in one community in China. China does not have a universal VZV vaccination program and has a serious public health problem with VZV infections in young children. In this study Luan et al. chose a large study group from one community during routine annual testing. They acquired adequate permission to retrieve vaccine records and blood samples for testing. Both IgG and IgM anti-VZV antibody response data was presented in a concise manner along with reasonable statistical assessments of seroprevalence. Vaccinated children had a significantly higher IgG antibody responses than unvaccinated children while IgM responses were similar within the two groups. Vaccinated children also showed slight increased responses with age, as would be expected. They also showed much lower increases compared with a study in Korea, that has a universal vaccine program. DNA sequencing identified genotypes of VZV isolates, confirming the most prevalent circulating virus was genotype J, identical to the vaccine strain. Overall in spite of several stated limitations, the authors presented important data that showed significant lack of protection in approximately half of these young children that indicates a high risk of VZV infection and disease in this community and likely China, populations that would be better protected with more wide-spread, universal immunization.

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

Yes

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I am able to assess the statistics

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