Reviewer's report

Title: Repeated measures study of weekly and daily cytomegalovirus shedding patterns in saliva and urine of healthy cytomegalovirus-seropositive children

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Reviewer: Arnaud Marchant

Reviewer's report:

The manuscript reports the results of a useful and carefully conducted study. The objectives of the study are important and clearly explained. As acknowledged by the authors, the methods suffer some limitations but these are acceptable given the challenge of organizing follow-up studies in healthy children. The results are clearly presented and discussed. The discussion is clear and clearly acknowledges the limitations of the study.

Discretionary revisions

- the characteristics of the CMV seropositive children who were not shedders at recruitment and the results obtained in this group could be further discussed. Anti-CMV IgG may be of maternal origin in some of the ones who are below 18 months of age. The results showing that shedding was less frequent during the follow-up of this group is intriguing. The authors could discuss the factors involved. They may include a better control of viral replication, a different viral strain, a more distant CMV infection or a lower exposure to CMV.

- The authors suggest that children may shed more virus than adults and that this may be related to physiological differences. It is unclear to which differences they refer. They may refer to the intensity of viral replication and its control by the immune system. This could be clarified.

- CMV shedding following natural infection of juvenile and adult rhesus macaques was recently described (Antoine et al, JID 2014). These observations may be of interest for the discussion.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.