Reviewer's report

Title: Immunomodulatory factors in cervicovaginal secretions from pregnant and non-pregnant women: A cross-sectional study

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Reviewer: Attila Molvarec

Reviewer's report:

The authors investigated in this cross-sectional study several immunomodulatory factors in cervicovaginal secretions from pregnant and non-pregnant women in a comprehensive manner. They concluded that pregnancy is associated with reduced CCL22 concentration in cervicovaginal secretions, which could influence the risk for HIV transmission. Overall, the manuscript is well written and could add to our knowledge in the field. The following issues need to be addressed before acceptance of the manuscript:

Major compulsory revisions:

1. The authors mention in the manuscript that CCL22 expression fluctuates in the endometrium during the menstrual cycle. Did they examine the effect of menstrual cycle on CCL22 concentration in CVL? On which cycle days were their samples collected?

2. The authors found several correlations of CVL CCL22 concentration with other immunomodulatory factors. These results should be discussed. Did the correlations remain significant when non-pregnant and pregnant women were analyzed separately?

3. In the adjusted model, the inverse association of CVL CCL22 concentration with time since last coitus remained significant. Do the authors have a hypothesis for this observation?

4. Analysis of covariance (ANCOVA) should also be undertaken to determine whether the observed difference in CVL CCL22 concentration between pregnant and non-pregnant women is independent from potential confounders.

Minor essential revisions:

1. On page 8, there is a mistake regarding the p value for multiple testing. It should be less than 0.0013 (not greater than this value).

2. The authors should mention in the manuscript that normal pregnancy is characterized by a shift towards Th2-type immunity and away from Th1- and Th17-type immune responses at the systemic level. In this context, the following papers should be cited:


Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.