Reviewer’s report

Title: Human papillomavirus is found in peripheral blood CD20+ and CD56+ cells during HPV-16 semen infection.

Version: 1 Date: 14 November 2013

Reviewer: Sabine Brandt

Reviewer’s report:

This is a very important article in the field as it deals with a thus far poorly understood issue, that is, the presence of PV DNA & protein in blood cell subsets, and presents very interesting novel data.

Minor essential revisions:

Most parts of the article are well written, there are some smaller lingual/stylistic errors (notably in the discussion) that should be corrected, perhaps with the help of a native speaker.

In general, the article is very clear, experiments are sound, well designed and well described, and the results are new, very thrilling and strengthen the concept of infection with some PV types (perhaps those expressing E5?) including a viraemic phase.

In this context, a recent paper on detection of BPV DNA and transcripts in blood cells a few days after experimental inoculation of horses with BPV1 may be mentioned in the discussion (Hartl et al., 2012; JGV). Roperto et al., also identified subsets of bovine blood cells that are permissive for BPV infection, i.e. T and B lymphocytes. Please compare these findings to yours and discuss this.

Regarding MHC I downregulation: E5 is equally involved in it - please change the respective sentence accordingly and add the appropriate reference (you may cite e.g. Ashrafi GH, Brown DR, Fife KH, Campo MS. Virus Res. 2006 Sep;120(1-2):208-11.)

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'