Reviewer’s report

**Title:** Comparing human papillomavirus prevalence in women with normal cytology and invasive cervical cancer to rank genotypes according to their oncogenic potential: A meta-analysis of observational studies

**Version:** 1  **Date:** 13 March 2013

**Reviewer:** Lauren Wilson

**Reviewer’s report:**

The paper by Bernard et al. is a meta-analysis of HPV genotype distribution drawn from case-control studies of invasive cervical cancer that included some HPV genotyping. The study design is interesting, and approached this question in a fairly unique way. Their ranking of oncogenic potential of HPV genotypes is relatively consistent with existing literature, but does suggest that some HPV genotypes that are considered only potentially carcinogenic should be examined more carefully and included in more genotyping assays for further study. These are interesting findings worthy of publication.

- **Discretionary Revisions**

1.) I understand why the authors chose to use only ICC as their endpoint in terms of investigating carcinogenic potential instead of pre-cancerous lesions. However, it may be worthwhile to point out in the discussion that in terms of clinical management, precancerous lesions are still currently the major endpoint of interest as we have no good way of predicting which lesions will invade and which will regress.

2.) There were a few things that were slightly unclear to me in the analysis that might be useful to explain a bit more in the methods. If HPV16-positive women are serving as the reference group but no accounting is done for multiple infections, if a women is infected with both 16 and 18 is she included both in the reference group and the 18 comparison group? I was not sure whether the analysis was being conducted on an infection-level, where the authors were basically looking at whether an infection was occurring in a case or a control, or whether the analysis was being conducted on a woman-level which would not include the same woman in both comparison groups. I may just have missed this but I found it confusing.

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

**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 I have no competing interests.