Reviewer's report

Title: High-risk Human Papillomavirus Infection is associated with Premature Rupture of Membranes

Version: 2 Date: 23 April 2013

Reviewer: Jeroen Vanderhoeven

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Major Compulsory Revision:
0. A statistician should verify the use of multivariate logistic regression in this study. After controlling for 6 variables, there appear to be insufficient number of events per variable which may affect the validity of statistical inference. (IE, PROM occurred in a total of 12 HPV positive subjects).

Minor Essential Revision
1. In Methods: Define parameters for cross sectional study. Use specific date ranges. Did all patients at KUMC participate in HPV testing? What was the loss to follow up at the 6wk postpartum visit?

Discretionary Revisions
2. In Methods: list which subtypes HPV are noted to be "high risk" by the Hybrid Capture II diagnostic system.
3. In Results: Known risk factors for HPV infection include immunocompromise, HIV, and smoking status. Inclusion of this data would benefit this study, exclusion should be cited as an additional limitation. While it may be that HPV infection is associated with increased risk of PROM via a common modality of tobacco use. The authors stimulate interesting discussion by highlighting novel research implicating HPV-mediated increased MMP activity as a possible mechanism for their finding.

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

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