Reviewer's report

Title: More men than women make mucosal IgA antibodies to Human Papillomavirus type 16 (HPV-16) and HPV-18: a study of oral HPV and oral HPV antibodies in a normal healthy population.

Version: 4 Date: 2 April 2006

Reviewer: John Sellors

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstract, last sentence of Results section - not given what the 95% CI is for - if it is for OR, the OR should be given.
Abstract, last sentence of Conclusions section - the reference to 'fewer men than women make antibodies' is not supported by any of the Results.
pg 5, last sentence - the authors have missed the point that the utility of including men in a HPV vaccination program to protect women from cervical cancer is currently being debated and it is not appropriate to make such a categorical statement.
pg 6, last sentence of Study population subsection - '...12 had cleared their CIN (CIN0) (CIN patients).' is difficult to interpret and there is no information given to explain how it is known that these women had cleared a previous CIN.
Page 13, 1st sentence - The data are not given to support the assertion that an association between FEH and type 13 is supported.
Conclusion, 1st sentence - The evidence for this statement is lacking.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

pg 5, 2nd line - 'Using this test...' the authors are referring to a sampling method not a test/assay here.
pg 6, 2nd line - '...increased sexual activity.' is incorrect and should refer to relatively higher rates of sexual activity.
Pg 7, 2nd sentence - the reference to the exclusion of subjects in whom the buccal samples were collected by swab should be deleted as this is confusing unless further information is given.
Pg 7, last sentence of Sample collection subsection - the reference to the women from the colposcopy clinic as CIN patients is probably an incorrect characterization of this group. This group is referred to similarly in subsequent places in the paper.
Page 7, 4th sentence HPV DNA determinations subsection - No information is given on the method used for sampling the cervixes of these women. An acknowledgement of Roche should be put in the Acknowledgements section at end of paper.
Page 10, Statistical analysis subsection - a reference to the kappa coefficient statistic should be given.
Results section, page 10 - in the Oral HPV DNA and Oral antibodies in children, adolescents and adults subsections - there is an absence of p values when comparisons are being made between
groups on prevalences of DNA and antibodies. In last line of Oral HPV DNA subsection, the statement that 'There was no apparent gender difference in oral HPV prevalence.' is not supported by any data or statistical testing. Similarly for the next sentence referring to oral antibodies. Page 11, 4th sentence - saying that 'There was no concordance..' is not the same as what is expressed by a kappa <0.4 Page 12, Antibodies in women with CIN subsection, 2nd sentence - the 44 women from the colposcopy clinic did not all have CIN and it is presumed that one cannot say that all of the 69 other women were not evaluated by colposcopy to enable one to say that they are 'normal' with respect to cervical neoplasia. Page 12, same subsection, 4th sentence - this is an example of the kappa values that are given throughout the paper, always referring to <0.4. More explanation needs to be given as to why this level of kappa has been chosen as a cutpoint and a p value or 95% CI should be given for each result. Page 13, 3rd and 5th sentences - Both are difficult to comprehend.

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Reject because scientifically unsound

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes

**Declaration of competing interests:**

I declare that I have no competing interests.