Reviewer's report

Title: Prevalence and distribution of high-risk Human papilloma virus (HPV) types in invasive squamous cell carcinoma of the cervix and in normal women in Andhra Pradesh, India

Version: 2 Date: 2 September 2005

Reviewer: Elizabeth R Unger

Reviewer's report:

General
The authors seek to determine type-specific HPV prevalence in women of Andhra Pradesh, India with cervical cancer and in a screening population. The data is of importance in planning HPV vaccination strategies, despite the relatively small numbers in the study. The manuscript is appropriate for a short communication and should be significantly shortened.

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

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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)

1. The results include a lot of points that are more appropriate for discussion. The discussion and introduction overlap a little. Both the discussion and introduction should be more focused on this study and shortened.
2. Unless the hc2 method differs from the manufacturer’s protocol, the details should not be provided. Similarly the details of the line blot assay are described in other papers, so only changes should be noted after referencing method.
3. Figure 1 is not necessary.
4. MM9 in Table 1 should be replaced with HPV 73 as used in text. In Table 3, the Patient ID column should be omitted. The RLU values should rounded to one decimal point.
5. The testing strategy needs to be clarified. In the text it is stated that PCR was performed only if hc2 was positive, however from Table 3 it appears that PCR was done for both physician collected and self-collected samples in participants with positive hc2 result in either sample.
6. In methods it is stated that Digene sampling brush was placed in Digene STM, and then sample aliquotted. How were cell dislodged from brush, and was brush removed? The usual hc2 protocol calls for denaturation of samples prior to removing aliquots.
7. What method was used for extraction of tissue DNA? How was sample disrupted, how much was extracted and what was final volume of extract. What volume was put into the PCR?
8. The method states that 70 microliters of each STM was extracted, but does not state the final volume of extract. The 10 microliters of extract was put into what volume PCR?
9. The authors attribute hc2 positive/PCR negative samples to low “viral titers” in the sample. The term titer should probably be avoided in this context; viral load is preferable. The authors conclude that viral load is low because the RLU values are low. It is equally possible that the low RLU are because of non-specific background problems and false positive hc2 results cannot be excluded. The authors should modify their interpretation of these discrepant test results.

Discretionary Revisions (which the author can choose to ignore)
What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I have received reagents from Roche Molecular Diagnostics. These are the same reagents used in this manuscript.