Reviewer's report

**Title:** Anal cytological abnormalities and correlates among men who have sex with men at risk for HIV-1 infection

**Version:** 2  **Date:** 1 September 2012

**Reviewer:** Elizabeth A Stier

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This manuscript does provide valuable data by adding to the available information on prevalence of anal HPV and abnl anal cytology in HIV- MSM. However, the title is misleading – as the term “correlates” is not correct. Would rename.

Abstract:

Correlates is a vague term—typically would suggest histologic correlates—not demographic as is used here. would find a different word.

The following statements do not make sense unless the “higher proportion” was not statistically significant.

None of the socio-demographic and behavioral factors analyzed showed a significant association with abnormal cytological findings. However, a higher proportion of ASC-US+ cases was found in older MSM, in those with a higher number of lifetime sexual partners and in those with a history of ano-genital warts.

Intro—needs to be more focused on what this study does—ie, prevalence data for HPV and anal cytology for young MSM.

Would delete the second paragraph, and re: the third, even if histologic HGAIN is found in this population, that in of itself is not a reason to screen. Rather if treatment of the HGAIN in this patient population results in decreased anal cancer rates, then screening may be appropriate.

Again, focus on what this manuscript shows.

Results—

Is 38.5% different from 36% different from 43.5%?? If anything, what is more surprising is that abnormal cytology is associated with HPV infection of any kind…….

With respect to HPV-negative individuals, increased proportions of anal cytological abnormalities were evidenced both in patients infected by LR types only (12.0% vs.
38.5%, COR=4.56, 95% CI: 1.78-11.90) and in those with any HR type (12.0% vs. 36.0%, COR=4.10, 95% CI: 1.88-9.17). Importantly, MSM with HPV 16 and/or 18 anal infection showed a proportion of abnormal cytology more than three times higher than that found among HPV-negative participants (43.5% vs. 12.0%, COR=5.62, 95% CI: 2.33-13.81).

need to be clear on what is TREND data vs. that which is statistically significant. However, a tendency was observed for some variables. In detail, a higher proportion of ASC-US+ cases was found in older MSM, in those with 20-49 lifetime sexual partners and in those with a history of ano-genital warts than in the respective reference groups.

Discussion—

Would comment on the 14% with an inadequate specimen for cytology? Yet you were able to get HPV results. Seems surprising.

Suggested edits:
First 3 sentences not needed. Would delete.
Below should reference 18 and 19.
Notably, this is one of the few studies conducted on relatively young MSM (median age 32 years), while most of the previous studies focused on older MSM.
Final paragraph in the conclusion not needed.

Table 2—
Would add a line with data on HPV 16 and 18 prevalence.
Would delete table 4, especially as it really does not show a tendency for increased risk of abnormal anal cytology with increased age.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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