Reviewer’s report

Title: Detection of hydrogen peroxide-producing Lactobacillus species in the vagina: a comparison of culture and quantitative PCR among HIV-1-seropositive women

Version: 1 Date: 2 March 2012

Reviewer: Jimmy Twin

Reviewer’s report:

This study potentially gives the reader useful data concerning the correlation of culture versus molecular detection of various vaginal lactobacilli. It is essential that quantitation data (both qPCR and culture) is included to see how well these two assays correlate, and this may help the authors rationalize the results in the conclusion. The qPCR can be normalised against the human qPCR data to adjust for sample to sample variation.

Major Compulsory Revisions

• Abstract: in the Conclusions, please state the proportion of detectable L. crispatus/jensenii
• Abstract: in the Conclusions, state how much L. gasseri accounts for the discrepancy
• The title of the article implies a quantitative PCR assay was used. Please include the quantitation data.
• It would be good to see the CFU counts for the lactobacilli and see how that compares to the lactobacilli qPCR data

Minor Essential Revisions

• “Lactobacillus” should be italicised, or else use the term “lactobacilli”
• Insert reference for human 18S rRNA gene PCR

Discretionary Revisions

• State the culturing conditions used.. was it anaerobic or aerobic? This may be important to mention.
• State the g force instead of the rpm for centrifugation
• “subset” does not need to be hyphenated
• Be consistent when referring to products (eg. Mo Bio DNA kit)
• State the BLAST length region as well as the percentage for defining species, and the variable regions covered
• Insert reference stating L. iners does not produce H2O2
Level of interest: An article of importance in its field

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 that I have no competing interests