Reviewer’s report

Title: Comparing urine samples and cervical swabs for Chlamydia testing in a female population by means of the SDA method.

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Reviewer: marian Currie

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Comparing urine samples and cervical swabs for Chlamydia testing in a female population by means of the SDA method.

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Thank you for asking me to review this paper which describes a laboratory-based study designed to determine if strand displacement amplification (SDA) coupled with fluorescent energy transfer (ET) measurement is as effective in detecting chlamydia DNA in urine specimens from women as it is in detecting chlamydia DNA in cervical swabs.

The study question is well defined.

Compulsory Revisions

Background
The first 3 paragraphs of the background are not really related to the question and could be omitted or condensed. The fourth paragraph is most relevant.

Methods
The paragraph entitled ethics should be moved to the beginning of the Methods section.

Reword the second sentence of the last paragraph before Laboratory methods. "A woman was considered CT positive if both FCU and the cervical swab were positive by the SDA method (BDPT) or if one of the specimens tested positive by the SDA method and at least one specimen was positive for the Cobas TaqManCT or the in-house PCR."

Study population
1. Most of the paragraph headed Participants belongs in the Results section. Exclusion criteria should stay in this paragraph.
2. I am not entirely sure what a "low threshold" drop-in policy is? Perhaps there is/are another word(s) that could be used or the term could be explained?
3. I would prefer to know how many patients, and the proportion of
females, who attend the clinic and test positive annually rather than the population of Bergen.

Specimen collection
It is probably the electronic upload but organisms should be italicized.

Statistical analysis
I would like to know how many Bootstrap computations were undertaken.
Think about moving the information about the stats packages to where you describe their uses.

Data
1. The results should commence with a description of the participants, i.e. most of the paragraph Participants previously mentioned. I would like to know exactly why the 15 women were excluded from the study, i.e.

proportion pregnant and proportion who had used antibiotics. I would also like to know the proportions in the various age groups - numbers and %. 2. The information in Table 3 is partly replicated in the text. I think it would be better to omit most of information in the Results (page 10 paragraph 3) concerning Table 3 and let it speak for itself. Either that or omit Table 3 and put the results in the text including 95% CI. If Table 3 remains please retitle i.e. remove "shows" from title.

3. It would be good to have the 95% CI for the PPV and NPV.

Discussion and conclusions
I think the discussion needs to address comparisons with SOLVs. These are an "express' method which may be more acceptable to women than FCU and have greater sensitivity and Specificity. The authors need to make their case for FCU over SOLVs rather than just state that vaginal swabs are not validated by the manufacturers of the two most commonly used NAATs in Norway.


| Abstract | Full Text | PDF-195K |
I think the paper would be enhanced by some reference to comparative cost effectiveness. The authors may find this recently published paper useful.

Cost-Effectiveness of Screening Strategies for Chlamydia trachomatis Using Cervical Swabs, Urine, and Self-Obtained Vaginal Swabs in a Sexually Transmitted Disease Clinic Setting
Diane R. Blake, Nancy Maldeis, Mathilda R. Barnes, Andrew Hardick, Thomas C. Quinn, and Charlotte A. Gaydos
Sex Transm Dis. Author manuscript; available in PMC 2009 July 16.
Manuscript: | Abstract | Full Text | PDF-1.3M |

Small point - so as not to overstate the case, it may be better to use "proportion of positive tests" rather than "prevalence" in paragraph 3 on page 11 in the Discussion.

6. Are limitations of the work clearly stated?
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes to both, but see points above about vaginal swabs and cost effectiveness.

8. Do the title and abstract accurately convey what has been found?
Yes and No
1. All abbreviations need to be spelt out in full i.e. SDA, CT, BDPT PCR and BC.
2. Aim rather than Background may better describe the first section of the abstract.
3. It would be good to know how many Bootstrap replications were computed and also to see the Bootstrap confidence intervals in the abstract.

9. Is the writing acceptable?
Yes, some minor grammatical changes required.