Reviewer's report

Title: The Lactobacillus flora in vagina and rectum of fertile and postmenopausal healthy Swedish women

Version: 1 Date: 10 December 2010

Reviewer: Urban Forsum

Reviewer's report:

page 1:
Affiliation of some of the authors are given as “Malmö University” (perhaps University College of Malmö is meant), however to the best of my knowledge the so affiliated authors have position at Lund University. The mistake is disturbing and might suggest that some of the authors have not checked the manuscript before it was submitted.

page 2, line 7-8:
Compared with page 9 line 2-3 it seems that the authors give different aims/purpose of the study.

page 2, line 10:
I suggest the authors reconsider the use of “smear” throughout the paper to describe the sample obtained.

page 2, line 19:
spell out “LD”.

page 3, line 17: By definition postmenopausal women are not afflicted with Bacterial Vaginosis, sentence must be re-written.

page 4, line 5.
“Twenty healthy fertile women”. this is a problematic statement if not qualified by explicit reference to observations/examinations (structured clinical data and results of i.e. Amsel or Nugent scores). If this kind of data was not collected it is a major weakness in the study design.

page 5, line 14:
PCA, give a reference to the specific method used in applying PCA to the data set.

page 10, next last and last para.
The discussion on collagenous colitis is speculative and does not add much to the paper. What is really meant by “Treatment with probiotics may have a benign effect on the clinical course”?

page 11, line 1:
“amount” change to “number” (and in tables etc.).
Table 1-3.
Reword “… woman did not fulfill the analyzes”
Figures.
Seems to be submitted in duplicates.
Tables and figures:
Presentation could be done in a more compact format; especially the tables could be condensed without loss of information.
Authors´contributions
Unusual format and wording. Reconsider the wording, contributions are given individual per individual not task per task which is more easy to read. What does “financially supported” mean as written for some authors. Financial and other disclosures should be clearly spelled out per individual author and financial support to the study by granting organizations (and/or companies) clearly be spelled out.
General:
The paper does not add much new information to the accumulating body of knowledge in Lactobacilli in the vaginal and rectum. The lack of data on L. iners is disturbing and the authors should have seriously considered non-culture methods for the study.

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

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
I declare that I have no competing interests