Reviewer’s report

Title: HPV testing for cervical cancer screening: technical improvement of laboratory logistics and good clinical performance of the cobas 6800 in comparison to the 4800 system.

Version: 0 Date: 29 Aug 2018

Reviewer: Wen Chen

Reviewer’s report:

This study evaluated the agreement of cobas4800 and cobas6800 for detecting HPV and performance of clinic sensitivity and specificity on cervical cancer screening. The intra-laboratory and inter-laboratory reproducibility for cobas6800 were studied, too. Several issues need to be clarified:

1. According to manuscript, the normal sample for cobas680 HPV test is around 6 months old but 3 years old for the abnormal. How long is the PreservCyt sample used for cobas4800 HPV test?

2. In view of 50 cycles for cobas4800 is applied. I am not sure if it is also 50 cycles for cobas6800. If yes, it is better to output all the ct value less than 50. Scatter plots of ct value can be draw for comparison between cobas4800 and cobas6800 by HPV16, HPV18 and Other types, which can facilitate evaluation of the impacts of storage time and the two technologies' difference in more details.

3. Scatter plots of ct value are also needed for intra-lab agreement evaluation between cobas6800 HPV tests, inter-lab agreement evaluation.

4. Table3 is not necessary, suggest delete. Clinic sensitivity and specificity can be described in the manuscript.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review? If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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