Reviewer’s report

Title: The costs of offering HPV-testing on self-taken samples to non-attendees of cervical screening in Finland

Version: 2 Date: 5 June 2015

Reviewer: Morgan Marks

Reviewer’s report:

Minor essential revisions:
1) It would be helpful for the authors to expand on the statistical analysis methods utilized in their cost-effectiveness analysis. Specifically, what models were used to estimate the costs.

Discretionary revisions:
1) The authors conduct a sensitivity analysis of their cost effectiveness estimates based on increased detection of hrHPV by molecular assays as compared to standard cytology. It would be helpful for the authors to provide a reference for the 20% and 50% increased sensitivity estimates they utilize. Furthermore, it is unclear how extensive the authors factored into their analysis the effect of the reduced positive predictive value of HPV testing alone due to a high number of HPV infections that will not progress to cervical pre-cancer. This increased detection of hrHPV and potential overtreatment, while potentially being balanced out by Pap Smear triage, may have an effect on the costs associated with CIN 2+ detection. I believe the authors make mention of this in the discussion, however a further elaboration would be helpful.

2) Did the authors consider differences in non-attendance and the cost-effectiveness of HPV-testing by self-sampling by age group in their analysis? It is unclear if cost-effectiveness estimates, particularly costs associated with CIN 2+, are different among women >30 or >35 years of age as compared to women <30 or <25 years of age. As above, a comment in the discussion section would be informative.

Level of interest: An article whose findings are important to those with closely related research interests

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 am an employee of Merck and Co. Inc, a manufacturer of an HPV vaccine.