Reviewer's report

Title: Efficacy and Safety of Prophylactic Vaccines against Cervical HPV Infection and Diseases among Women: A Systematic Review & Meta-Analysis

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Reviewer: Giuseppe La Torre

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Major compulsory revisions

- The introduction is poor and need to be reinforced. Some important HTA report on HPV vaccination are missing. As an example, the authors did not cite the following:
  A. DACEHTA. Reduction in the risk of cervical cancer by vaccination against Human Papillomavirus (HPV). Health Technology Assessment 2007; 9(1).
  The second one was particularly important since for the first time reported a systematic review and meta-analysis of 5 RCTs concerning efficacy of quadrivalent vaccine.

- The authors reported that the aim of the study was to perform a systematic review “to allow informed decision-making based on all existing evidence”. According to the reviewer, this point must be re-written, since this point is unrealistic. The authors should report the aim strictly related to scientific purposes.

- It is not clear how the methodological quality was assessed. The authors must explain why they did not choose very used scale, such as Jadad or Chalmer scale.

- The sensitivity analysis was only reported in a descriptive way, without giving a robust possible explanation of the heterogeneity between studies.

- In the discussion the authors reported as limitation of the study the fact they “were not able to evaluate prophylactic efficacy against anogenital warts, vulvar, vaginal or anal diseases associated with vaccine HPV due to the limited number of trials [13, 14, 19] that reported such endpoints as well as the common use of composite endpoints that included infection and disease of various sites”. According to this judgment, the authors should have not perform this systematic review, since in their analyses they pooled the results from 2 to 4 RCTs. For all these outcomes (anogenital warts, vulvar, vaginal or anal diseases HPV related),
at least two RCTs could be pooled.
- Publication bias was not assessed, via funnel plot.

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