Reviewer's report

Title: Hospitalization for Human Papillomavirus -attributable disease

Version: 2 Date: 9 April 2013

Reviewer: Giovanni Gabutti

Reviewer's report:

The authors have estimated the burden and the historical trend of hospitalizations of HPV related disease in a wide population.

The manuscript is interesting and sufficiently clear, even if the quality of written English should be improved.

- Major compulsory revisions

Introduction section

The role of oncogenic HPV types in cancers affecting cervix should be included.

The sentence "Many authors have also highlighted the involvement of HPV in cancers affecting the oropharynx and oral cavity [3], Kreimer et al in 2005 conducted a systematic meta-analysis to review the available literature in the field and ascertain the worldwide prevalence of HPV in neck squamous cell carcinoma and the prevalence of HPV in neck squamous cell carcinoma was estimated at 26% [4]." should be re-written.

The sentence " A number of studies in the literature estimate the burden of HPV-related diseases by collecting data on primary care level, only an European Spanish study has previously reported the burden of HPV-related hospitalization refereeing only to anal and penile neoplasm discharges [7]." should be re-written.

Methods section

The sentences "The attributable fraction to HPV was defined as a proportion of the cases of disease observed in all related hospitalizations attributable to HPV infection. In particular, all cases of cervical cancer and genital warts were assumed to be HPV-related, while for cancers of the male genitalia and anus the fractions considered were 50% and 88%, respectively, and for oropharyngeal cancer it was 26% [2-4]." should be re-written.

Results section

Showing the hospitalization rate in females, it could be useful to clarify which part of "genital cancer" is related to cervical cancer.

The sentences " Over the whole study period, in the hospitalization rate for males was stable, from 16.1/100,000 in 2000 to 16.3/100,000 in 2010. The increase of cases were of genital warts (+81.7%;p<0.001), and the cases of genital cancer also increased (+10.0%;p=n.s.), while the anal and oropharyngeal cancers both
dropped (-45.3% and -36.8%, respectively; p<0.05) (Figure 1).” should be re-written.

Discussion section
An ample debate on male vaccination is ongoing. As the implementation of male vaccination should be related to the achievement of a high VC% in females, it should be interesting to have included a comment on the coverage rate achieved in females in Veneto Region.

The reference n.19 should be updated and changed with : Giambi C. Stato di avanzamento della campagna vaccinale per l'HPV: dati di copertura vaccinale al 30/06/2012- rapporto semestrale www.epicentro.iss.it/problemi/HPV/pdf/aggiornamento

It could be useful to add a comment on the paper by Hartwig et al, BMC Cancer 2012, including this reference as well.

Table 1
The total number of oropharyngeal cancer is 1,176 (and not 1,177)

Minor essential revisions
Introduction section
line 14 "Each year, genital warts is...." please change is with are

Methods section
line 10 "Condylomaacuminatum" please correct
line 14 "HPV -correlated", please correct as follows: HPV-related

Results section
line 2 "We identified 15,537 of.." please delete of

Level of interest: An article of importance in its field

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 during the last five years I received reimbursements, fees or funding by GSK, Sanofi Pasteur MSD, Novartis, Crucell/Janssen, Pfizer. Besides, I have been or I am involved as PI in clinical trials sponsored by GSK, Novartis, Sanofi Pastuer MSD and I have acted or I am acting as Member of Scientific Boards organized by GSK, Sanofi Pasteur MSD.