Reviewer's report

Title: Herpes zoster-associated mortality in Europe: a systematic review

Version: 2 Date: 2 March 2015

Reviewer: Piero Poletti

Reviewer's report:

This manuscript is well written and provides an interesting view on what the HZ associated mortality is in Europe. The review proposed by the authors appears sufficiently clear to be appealing for a broad set of potential readers. Overall, I think that the manuscript should be accepted for publication. Nonetheless, I strongly suggest the authors to address some minor points before publication, especially as for the presentation of results in Figure 2 that is graphically unacceptable and very confusing.

I have no major comments for the authors.

Minor comments:

Fig 2:

It is really difficult to interpret this figure. For instance, why 10 curves are reported in panel C but only 5 countries are reported in the associated legend? Labels and axes are reported twice in all panels and it is difficult to recognize curves associate to different countries. Moreover, some references reported in legends of different panels seem inconsistent.

“Background“:

- some references should be provided when introducing the epidemiology of HZ
- lower case should be used for “Immunosenescence”
- two different definitions for PHN (and percentages from 20-50% to 10-20%) are reported in “background” section

“Data analysis“:

- it would be preferable to use “age-specific mortality rate “ instead of “mortality rate”
- more details should be provided on what "on-line extraction tools" are (end of the paragraph “Data analyses”)

“Results”

- pg9 r4: ICD should be defined at its first occurrence
- pg10 r2: 7 studies are mentioned but 8 references are reported
- I did find the supplementary materials mentioned at pg8
Discussion:

- the authors say “Although only three studies in this review reported CFRs ... “. This is a little bit confusing since 5 curves are show in fig 2b and 6 dataset are reported CFR (4+2) in the first paragraph of “Age specific case fatality and hospital fatality rates” section. Am I missing something?

- few data about morbidity are discussed in the manuscript which is mainly focused on HZ mortality in adults and the elderly. Thus I suggest to change the sentence “…they demonstrate that HZ is not a highly morbid disease, especially in younger people… “ and to refer to mortality instead of mobididy

Fig 5:
- Label of y-axis should be “age standardized” instead of “age standardise”