Reviewer’s report

Title: A prospective study of cancer risk among Agricultural Health Study farm spouses associated with personal use of organochlorine insecticides.

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Reviewer: Cristina Fortes

Reviewer's report:

The article entitled "A prospective study of cancer risk among Agricultural Health Study farm spouses associated with personal use of organochlorine insecticides" is interesting but some aspects can be improved as following:

Lines 177-180. Add the response rate of the "female and family health questionnaire" for the 28,909 spouses that participated in the study, instead of giving the response for the initial population (n=32,345).

- Lines 210-211, page 7. State the statistical method used to decide to include or not include covariates in the final models instead of only stating that "these covariates did not substantially affect our results and were not included in the final models"

- In page 8 lines 217-224- It does not seem a very good method not to include pesticides (both non-OC and OC pesticides) that were correlated. Combine pesticides that have similar biological action and have the same target organs in terms of toxicity based on experimental animals studies. For example combine Aldrin and Dieldrin and re-run the models.

- Line 224. Instead of using sun protection as a potential confounder for melanoma, sunburns should be used or at least skin colour if you do not have sunburns as a variable.

- State in the limitations of the study, the low response rate of the "female and family health questionnaire".

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