Reviewer's report

Title: A hybrid expert approach for retrospective assessment of occupational exposures in a population-based case-control study of cancer

Version: 0 Date: 09 Sep 2018

Reviewer: Stefano Silvestri

Reviewer's report:

The study is very interesting and shows a huge amount of work due to the large population-based epidemiological study. Anyway a phrase in the conclusions "Nevertheless, significant within-occupation variability remained with the hybrid approach, suggesting that experts took into account idiosyncrasies in the jobs descriptions" highlights the problem of within-occupation variability which in my opinion shouldn't be explained with just idiosyncrasies affecting the experts. On page 7, lines 36-41, while the confidence in the assessment rated as possible, probable and definite follows consolidated criteria, the concentration level, when the reconstruction of past exposure regards subjects working in different workplaces, shouldn't be rated with just semi-quantitative indices. Low in one workplace can be high in a different one. To overcome this problem it is useful to link a semi-quantitative index to a quantitative one with ranges of concentration. Authors should explain their method more in details end if the case, take this problem into account in the discussion paragraph.

Another observation regards the percentage of the working week exposed. Less than 5% can be translated in "sporadic", between 5 and 30% could be named as "low" but more than 30% without any step between 30 and 100% (continuous) joins together conditions of exposures up to three folds in terms of dose, which is in my opinion, quite confusing.

Authors should explain the reasons of this choice and take a note in the discussion paragraph and perhaps suggest other reasons for the "within-occupation significant variability".

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An article of importance in its field

Quality of written English
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Acceptable
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