Reviewer’s report

Title: Cannabis exposure and risk of testicular cancer: a systematic review and meta-analysis

Version: 0 Date: 26 Sep 2015

Reviewer: Britton Trabert

Reviewer’s report:

The reviewed manuscript provides a systematic review and meta-analysis of 3 case-control studies that evaluated marijuana use and risk of testicular germ cell tumors (TGCT).

Overall the authors present a thorough review of the literature that expands upon the previous meta-analysis of the 3 published studies that summarized results based on overall TGCT but not by histologic subtype.

Major comments:

The authors state that odds ratios and 95% confidence intervals were abstracted from the manuscripts, however the results reported in both Trabert et al, and Daling et al, were provided with only two significant digits, and the results reported in the current manuscript are based on three significant digits. The authors need to state any additional estimation that may have been used to ascertain the estimates used in the meta-analysis, as there are some inconsistencies in the data with respect to rounding.

Page 9 line 2, the statement about studies matching on history of cryptorchidism is incorrect, studies adjusted for history of cryptorchidism, they did not match on this criteria.

Page 12 lines 1-4, [26] incorrect citation, the statement regarding predisposition to current marijuana use if exposed prenatally or during early childhood isn't supported by the current citation. Further, this statement without an appropriate citation is speculative.

Given the case-control design of the summarized studies and average 10 year difference in age at interview of seminoma and nonseminoma cases, it is possible/plausible, that there is a consistent association between nonseminoma TGCT and marijuana use, because younger men were more willing to report marijuana use. This warrants further discussion by the authors.

Minor comments:

Biggs et al. 2012 (PMID 18708392) provides details of control participation for the Daling et al. study.

The sections on 'summary of meta-data for studies' and 'assessment of study quality' are redundant, the authors should consider reducing the repetitive details reported in 'summary of meta-data' section.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

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