Clinical Epidemiology

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RESPONSE TO LETTER

Effect of Exogenous Hormones and Reproductive Factors in Female Melanoma: A Meta-Analysis [Response to Letter]

Qian Sun[1], Hongyan Sun[2], Lele Cong[1], Yang Zheng[1], Nan Wu[1], Xianling Cong[1]

[1]Department of Dermatology, China-Japan Union Hospital of Jilin University, Changchun, Jilin, People's Republic of China; [2]Tissue Bank, China-Japan Union Hospital of Jilin University, Changchun, Jilin, People's Republic of China

Correspondence: Xianling Cong, Department of Dermatology, China-Japan Union Hospital of Jilin University, Xiantai Road 126, Changchun, Jilin, 130033, People's Republic of China, Tel +86 15904420533, Fax +86 431-89876626, Email congxl@jlu.edu.cn

Dear editor

We thank Chiavarini et al for his interest in our paper and for the opportunity to respond to his concerns.[1] Chiavarini et al mainly pointed out in their letter that ten articles were not included in our meta-analysis. We read these ten articles in detail and answered them as follows:

1. Botteri et al 2019.[2] SIR was used as a risk measure in this study, and we did not find relevant method that could be used to convert SIR into OR/RR/HR, nor did we find evidence that could be combined with OR/RR/HR. In addition, the study only included women who were on hormone therapy and did not provide a control group of melanoma patients who were not on hormone therapy, so we do not think there is enough data to calculate RR. Finally, this article was excluded according to our exclusion criteria.
2. Brinton et al 2015.[3] This article evaluated OC, HRT, age at first birth, parity, and age at menarche, but the data associated with parity and age at menarche could not be combined due to different classification from those in our study. After we included this literature in the study, the re-obtained results showed that the combined risk of melanoma in OC users was 1.00 (0.90–1.10), I^2=52%, among which the cohort study was 1.06 (0.98–1.14). The combined risk of melanoma in HRT users was 1.12 (1.02–1.23), I^2=46%, among which the cohort study was 1.10 (1.02–1.19). Women aged 25–29 at first birth had a combined risk of 1.21 (0.89–1.63) and women aged ≥30 had a combined risk of 1.17 (0.74–1.87) for melanoma, compared with those aged < 25. These are consistent with the results and conclusions of our original paper.[4]
3. Behrens et al 2010.[5] This article looked at uveal melanoma, which was not included in our analysis and was therefore excluded.
4. Vessey et al 2000.[6] Vessey et al 's more complete data published in 2006 is cited in our article.[7] The study population and data in the new paper include those in the old paper. The most recent and complete study was selected if studies from the same population were repeated, as stated in our inclusion and exclusion criteria.[4]
5. Hannaford et al 1991.[8] This article was excluded for the same reason as article 4. Hannaford et al 's more complete data published in 2007 is cited in our article.[9] The study population and data in the new paper include those in the old paper.
6. Holly et al 1991.[10] This article looked at uveal melanoma, which was not included in our analysis and was therefore excluded.
7. Hartge et al 1989.[11] This article looked at eye melanoma, which was not included in our analysis and was therefore excluded.

Received: 18 March 2022
Accepted: 25 March 2022
Published: 26 April 2022

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8. Gallagher et al 1986.[12] Since the classification of the data in this paper is different from other literatures and cannot be combined, it is excluded because there is no available data.
9. Green et al 1985.[13] Since we could not find the full text of this literature, it was not included in the study.
10. Kay et al 1981.[14] We did not find this paper in the database.

Thus, if Chiavarini et al had been careful enough, they would have found that nine of the ten articles should not have been included in the study. Although the second paper[3] could be included, it did not significantly affect our results and conclusions.

Concluding, our meta-analysis was methodologically rigorous enough that our conclusions were correct and indisputable.

Disclosure

The authors report no conflicts of interest in this communication.

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https://doi.org/10.2147/CLEP.S366969