



Correlation of ulcerative colitis (UC) and colorectal cancer (CRC): a systematic review and meta-analysis

Yansong Wang, Pu Wang, Lixiang Shao

Department of Oncology, The General Hospital of Western Theater Command, Chengdu, China

Correspondence to: Yansong Wang. Department of Oncology, The General Hospital of Western Theater Command, 270 Tianlu Road, Rongdu Dadao, Chengdu, China. Email: wangyansong_xz@163.com.

Response to: Wu J, Zhao A, Ge L. Comments on the selection of effect model and effect size in a meta-analysis. *J Gastrointest Oncol* 2022. doi: 10.21037/jgo-21-853

Submitted Jan 14, 2022. Accepted for publication Jan 30, 2022.

doi: 10.21037/jgo-22-42

View this article at: <https://dx.doi.org/10.21037/jgo-22-42>

We thank Dr. Wu *et al.* for his comments on our narrative review on the selection of effect model and effect size in a meta-analysis published in *Journal of Gastrointestinal Oncology* (1). Meta-analysis statistical methods include OR, RR, MD, and SMD, and only one of which is listed in the article. Moreover, it can be obtained from the calculation formula of OR and RR that when the incidence of the research outcome is relatively low, the OR value is close to the RR value, and the RR and OR can be interchanged (2,3). In the statistical analysis method, the article only describes the OR method among the common analysis methods, and does not describe the other statistical methods in detail.

Fixed-effects model analysis in meta-analysis is simpler, only the variability in effect size driven by sampling error needs to be estimated during the analysis (4). There is no prior belief in study-level variability, so systematic variability is taken into account. The zero value of the sample of equal effect sizes was not rejected, so a fixed-effects model was used (5).

Among the 11 included articles, we removed one article that did not compound the requirement through sensitivity analysis. Due to the lengthy process of excluding articles, we did not list the whole process of sensitivity analysis in the article, so we only listed the analysis results of 10 articles at the end.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Journal of Gastrointestinal*. The article did not undergo external peer review.

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://jgo.amegroups.com/article/view/10.21037/jgo-22-42/coif>). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

References

1. Wang Y, Wang P, Shao L. Correlation of ulcerative colitis and colorectal cancer: a systematic review and meta-

- analysis. *J Gastrointest Oncol* 2021;12:2814-22.
2. Ronksley PE, Brien SE, Turner BJ, et al. Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis. *BMJ* 2011;342:d671.
 3. Taneri PE, Kiefte-de Jong JC, Bramer WM, et al. Association of alcohol consumption with the onset of natural menopause: a systematic review and meta-analysis. *Hum Reprod Update* 2016;22:516-28.
 4. Borenstein M, Hedges LV, Higgins JP, et al. A basic introduction to fixed-effect and random-effects models for meta-analysis. *Res Synth Methods* 2010;1:97-111.
 5. Goh JX, Hall JA, Rosenthal R. Mini Meta-Analysis of Your Own Studies: Some Arguments on Why and a Primer on How. *Soc Personal Psychol Compass* 2016;10:535-49.

Cite this article as: Wang Y, Wang P, Shao L. Correlation of ulcerative colitis (UC) and colorectal cancer (CRC): a systematic review and meta-analysis. *J Gastrointest Oncol* 2022;13(1):452-453. doi: 10.21037/jgo-22-42