

## RESPONSE

# Response to Yang, Shi, Wang, et al.

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See the Notes section for the full list of authors' affiliations.

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We thank Yang and colleagues for their interest in our study and their careful reading of the manuscript. First, the primary analysis presented in Figure 2 of our manuscript focused on the association between physical activity and liver cancer (incidence or mortality). The study by Arem et al. (1) was not included in our primary meta-analysis because that study was superseded by Moore et al. (2). Thus, the mean hazard ratio with the corresponding 95% confidence interval (CI) in Figure 2 in our manuscript (3) is correct. However, our manuscript included a subgroup meta-analysis by study endpoint (liver cancer incidence vs liver cancer mortality; Table 2 in our manuscript), and the study by Arem et al. (1) was part of that meta-analysis on liver cancer mortality.

Regarding the second and third comments by Yang we double-checked the number of cases in Table 1 and Figure 2, and there were errors. A corrigendum has been published to correct the numbers.

Regarding the fourth point, we agree that the data reported on liver cancer mortality in Wen et al. (4) should have been included in the subgroup analysis by study endpoint. Thus, an updated meta-analysis showed the mean hazard ratio for liver cancer mortality did not change appreciably (hazard ratio = 0.80, 95% CI = 0.68 to 0.94, Cochran Q P for subgroup difference = 0.45) and is corrected in the corrigendum. The interpretation of our findings remains unaltered.

## Notes

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All authors disclose no conflict.

## References

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2. Moore SC, Lee IM, Weiderpass E, et al. Association of leisure-time physical activity with risk of 26 types of cancer in 1.44 million adults. *JAMA Intern Med*. 2016;176(6):816–825.
3. Baumeister SE, Leitzmann MF, Linseisen J, et al. Physical activity and the risk of liver cancer: a systematic review and meta-analysis of prospective studies and a bias analysis. *J Natl Cancer Inst*. 2019;111(11):djz111.
4. Wen CP, Wai JP, Tsai MK, et al. Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study. *Lancet*. 2011;378(9798):1244–1253.