

Reply to: “Aspirin use and the risk of malignant melanoma”



To the Editor: Lichtenberger and Burge¹ appropriately raise concern about melanoma risk in men who are exposed to chronic daily aspirin and the interpretation of the results of Orrell et al.² In this large population of patients with a history of no previous melanoma for both aspirin-exposed and the aspirin-unexposed groups, only patients with a minimum of 12 months of continuous once daily aspirin exposure who had ≥ 5 years of follow-up were included for analysis, thus well-serving the issue of being able to minimize both selection and surveillance biases. Consequently—and beyond the scope of this study—the much larger population of those patients who did not meet the strict study entry criteria would be expected to be consistent with the national average for aspirin exposure in patients between 45 and 75 years of age. In addition, the US Preventive Services Task Force recommendation³ for aspirin use in adults 45 to 75 years of age for cardiovascular disease prevention was released after the end date for this study population, and thus did not directly influence the study population contemporaneously. Importantly, to ensure capture of chronic once daily dosing, we used the “prescription” designation in the electronic medical record data repository which represents a line item in the physician’s current medications list created at the time of the clinic encounter and does not serve as representative of an actual written prescription for insurance purposes. Moreover, although regression analysis is a validated and widely used method to account for potential confounding factors as used in this study, the alternative of a matched case-control study to further reduce bias was beyond the scope of this work. Notably, the relative risk was attenuated in the total population, and in men, after adjusting for age.

Perhaps most importantly, studies investigating aspirin and subsequent melanoma continue to report conflicting results, in part because of variable study design and the unavoidable biases present in all retrospective studies. For example, contradicting the claim of “statistically significant preventive benefit of aspirin in melanoma” studies, within the well-regarded evidence-based systematic review on the chemopreventive role of aspirin for melanoma, the

conclusion was that chronic administration of aspirin or other nonsteroidal antiinflammatory drugs cannot be recommended for melanoma chemoprevention.⁴

In sum, although there was an increased risk of melanoma in men who had once daily chronic aspirin exposure, it remains that additional studies are warranted to better delineate the role of aspirin in both chemoprevention and the risk for melanoma. Importantly, the issue of media coverage of peer-reviewed scientific findings in high-quality journals is also beyond the scope of this work.

Kelsey A. Orrell, MB BCh BAO,^a Alfred W. Rademaker, PhD,^{b,c} Dennis P. West, PhD,^{a,c} and Beatrice Nardone, MD, PhD^a

Departments of Dermatology^a and Preventive Medicine,^b Feinberg School of Medicine, and the Robert H. Lurie Comprehensive Cancer Center,^c Northwestern University, Chicago, Illinois

Funding sources: None.

Conflicts of interest: None disclosed.

Correspondence to: Beatrice Nardone, MD, PhD, Department of Dermatology, Northwestern University, 676 N St Clair St, Ste 1600, Chicago, IL 60611

E-mail: b-nardone@northwestern.edu

REFERENCES

1. Lichtenberger LM, Burge S. Aspirin use and the risk of malignant melanoma. *J Am Acad Dermatol*. 2019;80:e13.
2. Orrell KA, Cices AD, Guido N, et al. Malignant melanoma associated with aspirin use in males: a large, single center, US patient population cohort study from the Research on Adverse Drug Events and Reports (RADAR) Project. *J Am Acad Dermatol*. 2018;79:762-764.
3. US Preventive Services Task Force. Aspirin to prevent cardiovascular disease and cancer. Available at: <https://www.uspreventiveservicestaskforce.org/Page/ArchivedTopics/aspirin-to-prevent-cardiovascular-disease-and-cancer>. Accessed August 10, 2018.
4. Goodman JR, Grossman D. Aspirin and other NSAIDs as chemoprevention agents in melanoma. *Cancer Prev Res (Phila)*. 2014;7:557-564.

<https://doi.org/10.1016/j.jaad.2018.08.016>