

# Letter to the editor regarding the publication “Association between matrix-metalloproteinase polymorphisms and prostate cancer risk: a meta- analysis and systematic review”

Rama Jayaraj<sup>1</sup>  
Chellan Kumarasamy<sup>2</sup>

<sup>1</sup>Clinical Sciences, College of Health  
and Human Sciences, Charles Darwin  
University, Casuarina, NT, Australia;

<sup>2</sup>University of Adelaide, Adelaide, SA,  
Australia

The authors of the article, “Association between matrix-metalloproteinase polymorphisms and prostate cancer risk: a meta-analysis and systematic review”, Zhou et al, have put forth a number of interesting points.<sup>1</sup> This paper, published in the journal *Cancer Management and Research* attempts to link matrix metalloproteinase (MMP) polymorphisms and the propensity to developing prostate cancer. Though a similar study has previously been done on ovarian cancer by authors credited in this study, this study does tread fresh ground on the topic of prostate cancer and has potential to act as a guideline for future research.

However, we would like to bring to attention a few possible improvements to the paper that may serve to benefit the study and better position it as a citable article. We believe that it is important to highlight, refer, and compare previous pioneer studies and publications in said field. Therefore, previous studies by Weng et al and Lin et al are of relevance to the study conducted by Zhou et al and are worthy of being included in the literature review.<sup>2,3</sup>

Furthermore, the inclusion of the “funnel plot”, “Orwin’s classic fail-safe N test”, “Begg and Mazumdar Rank correlation test” and the “Duval and Tweedie’s trim and fill” would present a better analysis of the possible publication bias as they are the standard tools used for assessment of bias.<sup>4-6</sup>

Finally, a minor suggestion to the authors is the inclusion of the Tau-squared value in the random effects model of statistical analysis, as it considers threshold effect, which is not considered by the usual I-squared and chi-squared values.<sup>7</sup>

We hope that the authors will consider the inclusion of these suggestions into their study as they have been presented solely to heighten the value of the paper and elevate it as a reference for future studies.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

1. Zhou H, Zhu X. Association between matrix-metalloproteinase polymorphisms and prostate cancer risk: a meta-analysis and systematic review. *Cancer Manag Res*. 2018;10:5247–5259.

Correspondence: Rama Jayaraj  
Clinical Sciences, College of Health  
and Human Sciences, Charles Darwin  
University, Ellengowan Drive, Casuarina,  
NT 0909, Australia  
Email [rama.jayaraj@cdu.edu.au](mailto:rama.jayaraj@cdu.edu.au)

2. Weng H, Zeng XT, Wang XH, Liu TZ, He DL. Genetic association between *Matrix Metalloproteinases* gene polymorphisms and risk of prostate cancer: a meta-analysis. *Front Physiol.* 2017;8:975–975.
3. Lin C-C, Wu C-T, Huang S-H, Wu LS-H, Ls-H W. Polymorphisms of matrix metalloproteinases and their association with metastasis and the efficacy of androgen-deprivation therapy for prostate cancer in Taiwanese men. *Urological Science.* 2015;26(4):259–266.
4. Begg CB, Mazumdar M. Operating characteristics of a RANK correlation test for publication bias. *Biometrics.* 1994;50(4):1088–1101.
5. Egger M, Davey Smith G, Schneider M, Minder C. Bias in meta-analysis detected by a simple, graphical test. *BMJ.* 1997;315(7109):629–634.
6. Duval S, Tweedie R. TRIM and fill: a simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics.* 2000;56(2):455–463.
7. Lee J, Kim KW, Choi SH, Huh J, Park SH, Review S. Systematic review and meta-analysis of studies evaluating diagnostic test accuracy: a practical review for clinical researchers—part II. Statistical methods of meta-analysis. *Korean J Radiol.* 2015;16(6):1188–1196.

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Cancer Management and Research 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Cancer Management and Research editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

## Cancer Management and Research

### Publish your work in this journal

Cancer Management and Research is an international, peer-reviewed open access journal focusing on cancer research and the optimal use of preventative and integrated treatment interventions to achieve improved outcomes, enhanced survival and quality of life for the cancer patient. The manuscript management system is completely online and includes

Submit your manuscript here: <https://www.dovepress.com/cancer-management-and-research-journal>

a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Dovepress