# EDITORIAL Letter to the editor: "Incidence of prostate cancer in transgender women in the US: a large database analysis."

This is a U.S. Government work and not under copyright protection in the US; foreign copyright protection may apply 2024

Prostate Cancer and Prostatic Diseases; https://doi.org/10.1038/ s41391-024-00846-8

We read with interest the brief report on prostate cancer in transgender women by Loria et al. [1] published in the February 2024 issue of this journal. We are delighted that the issue of cancer in transgender people is being given attention in this journal. However, we have some concerns about the methods used in this paper.

First, we are concerned about how the cohort of trans women was identified. The authors cited a paper by Jasuja et al. [2] but according to their Supplementary methods they only used the F64 ICD-10 code for Gender identity disorders and ignored the numerous other codes used in that study to identify a transgender cohort. The methods also do not detail any attempts by the authors to verify that their cohort consisted only of transgender women and did not include cisgender women taking estrogen. Validation studies recommend using more than one instance of this code or in combination with gender affirming treatment [3]. Further, we are curious why the authors did not examine the influence of spironolactone or 5-alpha reductase inhibitors; both which affect prostate volume by reducing testosterone and are not medications that would be prescribed to individuals assigned female at birth.

Secondly, the authors did not match to an internal cisgender comparison group but instead used the general population estimates from the Surveillance, Epidemiology, and End Results (SEER) program. Using matched cisgender men within their database would serve two functions. First, this would have ensured apples to apples comparisons with both populations being from the same age distribution and hospital system. The SEER estimates are standardized to the cisgender male US population in 2000, which has an age structure guite different from transgender women who tend to be much younger than the general population. Using cisgender men from the dataset could aid in validating the prostate cancer cases as the incidence should be similar to that of the general US population. To our reading, the authors did not validate the cancer cases at all and may have included prevalent cases or benign cases, resulting in an over estimation of the risk of prostate cancer in transgender women. As is, their results are confusing as they show an elevated risk by age strata, but an overall decrease in risk when the age groups are combined. What should clinicians and patients take away from these results?

The authors have access to the largest cohort of transgender women in the world. With this rich resource comes great responsibility to present accurate estimates of cancer risk for this vulnerable population.

## DISCLAIMER

The opinions expressed by the authors are their own and this material should not be interpreted as representing the official viewpoint of the U.S. Department of Health and Human Services, the National Institutes of Health or the National Cancer Institute.

Wayne R. Lawrence <sup>™</sup> and Carl G. Streed Jr<sup>2,3</sup> <sup>1</sup>Division of Cancer Epidemiology and Genetics, National Cancer Institute, Rockville, MD, USA. <sup>2</sup>GenderCare Center, Boston Medical Center, Boston, MA, USA. <sup>3</sup>Section of General Internal Medicine, Department of Medicine, Boston University Chobanian and Avedisian School of Medicine, Boston, MA, USA. <sup>™</sup>email: wayne.lawrence@nih.gov

## REFERENCES

- Loria M, Gilbert D, Tabernacki T, Maravillas MA, McNamara M, Gupta S, et al. Incidence of prostate cancer in transgender women in the US: a large database analysis. Prostate Cancer Prostatic Dis. 2024. https://doi.org/10.1038/s41391-024-00804-4.
- 2. Jasuja GK, de Groot A, Quinn EK, Ameli O, Hughto JMW, Dunbar M, et al. Beyond gender identity disorder diagnoses codes. Med Care. 2020;58:903–11.
- Indremo M, White R, Frisell T, Cnattingius S, Skalkidou A, Isaksson J, et al. Validity of the gender dysphoria diagnosis and incidence trends in Sweden: a nationwide register study. Sci Rep. 2021;11:16168.

### AUTHOR CONTRIBUTIONS

WRL and CGS all wrote and reviewed the manuscript.

### **COMPETING INTERESTS**

The authors declare no competing interests.