

Prostate Cancer Test Is Missing Early Disease in Transgender Women

Transgender women on hormone therapy tend to skew artificially low on prostate cancer screening tests, which may give false reassurance.

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Transgender women on hormone therapy tend to skew artificially low on prostate cancer screening tests, which may give false reassurance and delay diagnosis and treatment, reports a new study led by UC San Francisco.

The researchers found that transwomen scored 50 times lower than typical PSA tests (prostate-specific antigen), the gold standard tool to detect prostate cancer. This could mean that current “normal” thresholds are too high for transgender women, and their cancer might not be found until a later stage, the investigators said.

The [study](#) appears June 26 in JAMA.

Transgender women keep their prostates following gender-affirming surgery, which puts them at risk for prostate cancer. Often, they are on estrogen, the most common gender-affirming hormone. But patients taking estrogen are more likely to show up in their doctor’s offices with high-grade prostate cancer.

“Patients and clinicians should be aware that PSA values in transgender women on estrogen should be interpreted with caution, as they are different than those in cisgender men,” said lead author [Farnoosh Nik-Ahd](#), MD, a resident at the UCSF Department of Urology.

The prostate, a small gland that helps make semen, produces a protein called prostate-specific antigen, or PSA. Blood levels of PSA frequently are elevated in people with prostate cancer — and the PSA test, which measures those levels, is commonly used as a screening tool.

In the new study, investigators analyzed Veterans Health Administration records between January 2000 and August 2023. Altogether, 210 patients who were 40 and older, on estrogen and had no history of prostate cancer were included.

The researchers found that PSA levels were drastically lower in transgender patients on estrogen and these patients might not get additional screening until their PSA levels rose, which could mean

their cancers were detected at a later stage.

Currently, there are no PSA ranges specific to transgender women. The researchers said that further work is needed to determine the risks and benefits of PSA screening among transgender women and to pinpoint ideal prostate cancer screening practices for them.

“As more and more transwomen have appropriate access to gender-affirming care, it’s critical not to lose sight of long-term cancer risks in retained organs,” said co-senior author [Matthew R. Cooperberg](#), MD, MPH, a UCSF urology professor and co-leader of the [prostate cancer program](#) at the [UCSF Helen Diller Family Comprehensive Cancer Center](#).

“We are just starting to understand how estrogen and related treatments modulate prostate cancer risk, and how to interpret PSA values in this population, so we can evolve a rational and evidence-based screening policy,” he said.

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