

Men With HIV Have More Advanced Prostate Cancer at Diagnosis

Findings from a study comparing HIV-positive and HIV-negative veterans have implications for PSA screening and treatment strategies.

March 14, 2024 By [Liz Highleyman](#)

Military veterans living with HIV received prostate-specific antigen (PSA) screening less often than HIV-negative veterans and were more likely to be diagnosed with advanced prostate cancer or cancer that is more likely to progress, according to study results presented last week at the [Conference on Retroviruses and Opportunistic Infections \(CROI 2024\)](#) in Denver.

[Prostate cancer](#) is the most common cancer among people with HIV in the United States. While some cancers are more likely to occur in people with immune suppression, [this does not appear to be the case](#) for prostate cancer. In fact, one study found that HIV-positive men actually had [a lower prostate cancer incidence rate](#) than HIV-negative men.

However, the results presented at CROI suggest that men with HIV are diagnosed with prostate cancer at a later stage, on average, and are more likely to have tumors with characteristics linked to disease progression.

Keith Sigel, MD, PhD, of the Icahn School of Medicine at Mt. Sinai, and colleagues used medical records and cancer registry data to compare PSA testing, prostate cancer clinical characteristics and survival by HIV status among participants in the Veterans Aging Cohort Study-HIV (VACS-HIV), a national cohort of veterans with HIV and demographically similar HIV-negative veterans.

Using data from 2001 to 2018—after the advent of effective combination antiretroviral therapy—the researchers identified a cohort of 791 HIV-positive veterans with pathologically confirmed prostate cancer and available staging information and a comparison group of 2,778 men without HIV. The median age was approximately 62 years, two thirds were Black, about 20% were white and about 5% were Latino. Numerous studies have shown that Black men are more likely to develop and die from prostate cancer.

Prior to prostate cancer diagnosis, men with HIV were significantly less likely than HIV-negative men to receive PSA screening (1.25 fewer tests), and the difference was more pronounced for older men. At the time of prostate cancer diagnosis, more than 60% of men with HIV had a detectable viral load, suggesting suboptimal treatment despite stable access to care.

HIV-positive men with prostate cancer had a significantly higher PSA level (median 6.8 versus 6.3 nanograms per milliliter) compared with HIV-negative men, but there was no difference in Gleason scores. Men with elevated PSA levels are more likely to be diagnosed with prostate cancer, and, after diagnosis, higher levels are associated with more aggressive disease. A higher Gleason score means prostate cancer cells are more abnormal looking and more likely to grow rapidly.

Veterans living with HIV were more likely than HIV-negative men to be diagnosed with intermediate or high risk localized prostate cancer according to the [D'Amico risk classification system](#), which takes into account PSA levels, Gleason scores, tumor size and how much the cancer has spread. They were also more likely to be diagnosed with metastatic cancer (4.1% versus 2.7%). Having HIV was significantly associated with higher all-cause mortality, but not with higher prostate cancer-specific mortality.

“People with HIV were diagnosed with higher-risk prostate cancers more frequently in VACS-HIV than those without HIV, possibly reflecting lower rates of PSA testing in this group,” the researchers concluded. They added that these findings “may impact benefits of aggressive prostate cancer treatment strategies versus active surveillance.”

In his [review of key studies from CROI](#), Paul Sax, MD, of Brigham and Women's Hospital, wrote that these findings strongly suggest a “screening gap” for men with HIV.

The value of PSA screening remains controversial. The test can diagnose cancer earlier, when it is easier to treat, but it can also lead to “overdiagnosis” and treatment of cancer that would not have affected survival, potentially causing unnecessary side effects.

Current U.S. Preventive Services Task Force guidelines, [last updated in 2018](#), state that men ages 55 to 69 should make an individual decision about screening in consultation with their doctor, taking into account their specific risk factors and personal preferences. [The American Cancer Society recommends](#) that discussion about screening should take place at age 50 for men at average risk, age 45 for men at high risk (including Black men) and 40 for those with the highest risk.

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