PRESS RELEASE
04 November 2025 10:45:00 CET

Landmark Stockholm3 study shows potential to detect more aggressive and potentially lethal prostate cancers

A landmark study with nine-year follow-up, recently published in European Urology, demonstrates that Stockholm3 can detect aggressive and potentially lethal prostate cancers among men with PSA levels in the 1.5 - 3 ng/ml range. The study showed that these men, who had a positive Stockholm3, were nine times more likely (hazard ratio of 8.8) to have a high-risk biochemical recurrence after treatment than men with PSA 3 ng/ml or higher, and a negative Stockholm3. Approximately 20-30% of men aged 50-75 years have a PSA between 1.5 – 3 ng/ml.

“This study reinforces the strength of Stockholm3,” says Professor of Urology and Epidemiology & Biostatistics Matthew Cooperberg, co-author and researcher at the University of California, San Francisco. “Stockholm3 identified men who would normally be missed by commonly used PSA thresholds. Without detection and treatment, the data suggest that many of these men would have faced a substantial risk of prostate cancer–related mortality.”

“This long-term analysis of the STHLM3 trial shows that the Stockholm3 blood test can identify aggressive prostate cancers that conventional PSA thresholds may miss, particularly among men with PSA below 3 ng/ml, who remain at notable risk of recurrence despite curative treatment. On the other hand, men with elevated PSA, but low Stockholm3 scores, had low recurrence rates, highlighting the potential of this biomarker in reducing unnecessary biopsies and overdiagnosis of indolent disease,” says Associate Editor, European Urology: Gianluca Giannarini, MD.

"This changes how we think about the selection of men for screening and treatment in clinical practice." says Tobias Nordström, Urologist and Associate Professor at the Karolinska Institute. “Specifically, it reinforces the benefits of using risk-prediction tools such as Stockholm3 for men with low PSA levels.”

The findings extend the landmark STHLM3 screening trial published in 2015 (1) with nine-year follow-up data. The study includes 968 men treated for prostate cancer with radical prostatectomy or radiotherapy after screening, evaluating biochemical recurrence (BCR) and high risk BCR (2).

Key Findings:

- Men flagged as high risk by Stockholm3 (Stockholm3 Risk Score ≥ 11) despite having a low PSA (PSA < 3 ng/mL) were about nine times more likely (HR: 8.8, 1.06-72, p: 0.04) to have a high-risk BCR after treatment than men flagged by PSA alone (PSA 3 ng/mL or higher but Stockholm3 Risk Score < 11).

- In contrast, when PSA was high (3 ng/mL or more), but the Stockholm3 was negative (Stockholm3 Risk Score <11), cancer rarely came back over the long term. That suggests the disease was more indolent and slow growing in those men.
- The 5-year high risk BCR rate was significantly different across groups (p<0.001):
    - 9.0% in men with both elevated PSA and Stockholm3,
    - 5.3% in men with elevated Stockholm3 only,
    - 0% in men with elevated PSA only and negative Stockholm3,
    - 0% in men with low PSA and negative Stockholm3.

A Paradigm Shift in Prostate Cancer Screening

Current clinical guidelines rely on PSA thresholds of ≥3–4 ng/mL in identifying candidates for biopsy and treatment. This study shows that relying on PSA alone risks missing aggressive cancers, particularly in men with low PSA values. Men with aggressive cancers in low PSA values also have a significantly higher risk of dying from the disease.

1. Grönberg, H et al. “Prostate cancer screening in men aged 50-69 years (STHLM3): a prospective population-based diagnostic study.” The Lancet. Oncology vol. 16,16 (2015): 1667-76. doi:10.1016/S1470-2045(15)00361-7
2. Vigneswaran, HT et al. “Stockholm3 Versus Prostate-specific Antigen in Prostate Cancer Screening: 9-year Outcomes Demonstrating Improved Detection of Aggressive Cancers and Reduced Overdiagnosis from the STHLM3 Trial.” European urology, S0302-2838(25)04735-9. 16 Oct. 2025, doi:10.1016/j.eururo.2025.10.001

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About A3P Biomedical

A3P Biomedical is a company that specializes in advanced prostate cancer diagnostics. A3P’s main product, Stockholm3, is a clinically and commercially validated blood test for early detection and risk stratification of aggressive prostate cancer. A3P Biomedical is headquartered in Stockholm, Sweden. For more information, please visit **www.a3p.com**

About Stockholm3

Stockholm3 is a blood-based prostate cancer test, that runs a combination of protein biomarkers, genetic biomarkers and clinical information through an algorithm to find the probability of clinically significant cancer at biopsy.

Stockholm3 has been evaluated in clinical studies including more than 90,000 men. It is extensively tested in large population-based screening trials, as well as in real world clinical utility studies in primary care. Using Stockholm3 leads to a more accurate risk assessment than the current PSA standard. Stockholm3 detects 41-89% more men with aggressive prostate cancer and, at the same time, reduces over-detection by 37-52% compared to PSA.

Multiple Stockholm3 studies have been published in high-impact journals such as The Lancet Oncology, Journal of Clinical Oncology, and European Urology. The studies address both the specificity and sensitivity of Stockholm3 in multi-ethnic populations as well as health-economic benefits of implementing it in clinical care. For more information about Stockholm3 and our clinical studies please visit **www.stockholm3.com/**

About prostate cancer

Prostate cancer is the most common cancer in men. In 2020, the global incidence of new prostate cancer cases was 1.4 million, and prostate cancer specific mortality 370,000. Global prostate cancer incidence and mortality is expected to rise by 100% and 85% respectively by 2040, driven by an ageing population.

Attachments

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