

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

×



Memorial Sloan Kettering  
Cancer Center

[Make an Appointment](#)

[Press Releases](#)

[Research & Treatment](#)

[Refer a Patient](#)

## ABOUT US

[Our mission, vision & core values](#)

[Leadership](#)

[History](#)

[Equality, diversity & inclusion](#)

[Annual report](#)

[Give to MSK](#)

Previously, the team's research has shown that a single PSA test at age 50 or younger could predict the presence of prostate cancer in men up to 25 years in advance of diagnosis. "This latest study is a unique, natural experiment to test whether we can predict advanced prostate cancer many years before it is diagnosed," said lead author [Hans Lilja, MD, PhD](#), a clinical chemist with joint appointments in the Departments of Surgery and Medicine at MSKCC.



Hans G. Lilja

We have found that a single PSA test taken at or before age 50 is a very strong predictor of advanced prostate cancer diagnosed up to 25 years later. This suggests the possibility of using an early PSA test to determine which men should be the focus of the most intensive screening efforts.

Hans Lilja, MD, PhD, the study's lead and a clinical chemist at MSKCC

Prostate cancer is the most common cancer in American men after [lung cancer](#). This year, more than 230,000 new cases will be diagnosed, and according to the American Cancer Society, more than 27,000 men died from prostate cancer in 2006.

The findings are based on the research team's analysis of blood samples collected between 1974 and 1986 as part of a large, population-based study of middle aged men called the Malmö Preventative Medicine study. The study cohort, in Malmö, Sweden, included 161 men who had been diagnosed with advanced prostate cancer by 1999 and men of a similar age who had not developed cancer by that time.

The results showed that the total PSA level was an accurate predictor of advanced cancer diagnosis in men later in life. The majority, 66 percent, of advanced cancers were seen in men whose PSA levels were in the top 20 percent (total PSA > 0.9 ng/ml). The average length of time from blood test to cancer diagnosis was 17 years.

While this data does not have any immediate implications for general prostate cancer screening guidelines, Dr. Lilja adds, "We have found that a single PSA test taken at or before age 50 is a very strong predictor of advanced prostate cancer diagnosed up to 25 years later. This suggests the possibility of using an early PSA test to determine which men should be the focus of the most intensive screening efforts."

Vigilant, targeted screenings in high-risk men could allow physicians to intervene when the cancer is at an early stage.

The research was funded by grants from the [National Cancer Institute](#), the Swedish Cancer Society, and the European Union Sixth Framework Program. Dr. Hans Lilja holds patents for free PSA and hK2 assays.

## ▼ Connect

[Contact us](#)

[Locations](#)

[APPOINTMENTS](#)

[800-525-2225](#)



## ▼ About MSK

[About us](#)

[Careers](#) ■

[Giving](#) ■

## ▼ Cancer Care

[Adult cancer types](#)

[Child & teen cancer types](#)

[Integrative medicine](#)

[Nutrition & cancer](#)

[Find a doctor](#)

## ▼ Research & Education

[Sloan Kettering Institute](#)

[Gerstner Sloan Kettering Graduate School](#) ■

[Graduate medical education](#)

[MSK Library](#) ■

---

[Communication preferences](#)

[Cookie preferences](#)

[Legal disclaimer](#)

[Accessibility statement](#)

[Privacy policy](#)

[Price transparency](#)

[Public notices](#)

© 2024 Memorial Sloan Kettering Cancer Center