

# Detecting Cancer, Measure by Measure

January 17, 2013

## Aggressive prostate cancer may be more accurately found through changes in PSA levels

### E. David Crawford, M.D.



Dr. Crawford is the distinguished Professor of Surgery, Urology, and Radiation oncology, the Head of the Section of Urologic Oncology at the University of Colorado Anschutz Medical Campus.

720-848-0170  
www.edavidcrawford.com

A PSA test is a common way to screen for prostate cancer. While a single PSA reading may signal prostate trouble, repeated measurements of PSA may offer a more precise means of detection.

Prostate specific antigen (PSA) is a protein produced by the prostate gland. When elevated levels of PSA are found in the blood, it can be a sign of prostate cancer. A lone PSA screening, however, may not be conclusive. Several measurements over time may provide a more definite red flag of aggressive cancer, according to a new study.

### "Ask a doctor about PSA tests for detecting prostate problems."

Lauren Wallner, PhD, MPH, post-doctoral research fellow at Kaiser Permanente Southern California's Department of Research & Evaluation in Pasadena, led this retrospective study.

Dr. Wallner and her colleagues reviewed the electronic health records of about 220,000

men ages 45 and older over a 10-year period. The patients had at least one PSA measurement and no previous diagnosis of prostate cancer.

Authors observed that annual percent changes in PSA more accurately predicted the presence of aggressive prostate cancer when compared to single PSA measurements alone. Still, these upticks in PSA levels only marginally improved the prediction of prostate cancer overall. Participants were found to experience a 2.9 percent change in PSA levels per year on average. The rate of change in PSA increased modestly with age.

"The use of a single, elevated PSA level to screen for prostate cancer is considered controversial," said Dr. Wallner. "The screening may result in unnecessary prostate biopsies and subsequent treatments for localized prostate cancer, as it does not distinguish well between slow-growing and aggressive disease."

The CDC and other federal agencies follow the prostate cancer screening recommendations set forth by the US Preventive Services Task Force, which recommends against PSA-based screening for men who do not have symptoms.

E. David Crawford, MD, professor of surgery/urology/radiation oncology and head of urologic oncology at University of Colorado, Denver, told dailyRx News that change in PSA is a known risk factor for the presence of prostate cancer, but there are still questions regarding PSA velocity.

"Men who have a PSA velocity are biopsied more frequently than men who

don't," said Dr. Crawford. "If you do more biopsies, you are going to find more cancer over-detection."

Over-detection is the detection of cancer that, if left untreated, would not cause death. Dr. Crawford also warned that more aggressive cancers might not have an elevated PSA until late in the disease process.

Dr. Wallner hopes the results of this study may provide clinicians with an improved prostate cancer preventive strategy to better differentiate between men with an aggressive form of the disease and those who have slow-growing, indolent cancer that may not necessarily merit treatment.

"While we do not suggest that patients proactively seek out additional PSA measurements," Dr. Wallner said, "men who already have had multiple PSAs may consider discussing the change in their PSA levels with their clinician when determining future treatment strategies."

This study was published on January 15 in the *British Journal of Urology International*. It was funded by Kaiser Permanente.

ADVERTISEMENT



**RxWiki**  
**FREE PRESCRIPTION DRUG DISCOUNT CARD**  
✓ SAVE 10% TO 75% OFF

IT'S %100 FREE

powered by  
**1-800 ONCOLOGIST**