

## Free PSA Test Can Help in Deciding Prostate Cancer Treatment, Study Says

**OCTOBER 1999** – A percent-free PSA (fPSA) blood test can help prostate cancer patients and their physicians make better decisions about how to best treat the patient's cancer, according to a study published in the October issue of The Journal of Urology.

"When used with other patient information, free PSA results can assist the physician and patient in making more informed treatment decisions," said William J. Catalona, M.D., a lead author from the Division of Urologic Surgery at Washington University School of Medicine, in St. Louis.

The fPSA test can help determine which patients would benefit from surgery, and which patients would be better candidates for other therapies, Catalona said.

"Free-PSA blood tests can help doctors distinguish between tumors that are more likely to be aggressive – and therefore probably more advanced – from those that are more likely to be completely confined within the prostate and not as aggressive," Catalona said.

"This study used the Hybritech Free PSA blood test. Use of other manufacturers' assays may not yield the same results," Catalona said.

The Hybritech® free PSA test is manufactured by Beckman Coulter and is the only FDA-approved test for fPSA. The study was supported by a research grant from Hybritech, Inc., a Beckman Coulter subsidiary.

PSA (prostate specific antigen) exists in several forms in the blood, with some forms bound to protein and other unbound ("free"). As with cholesterol testing, scientists have found it useful to measure these various forms for better risk predictions. The Hybritech Free PSA test is used with the Hybritech total PSA test to determine the percentage of free PSA.

Catalona and his colleagues analyzed 379 men with prostate cancer and 394 with benign prostatic disease. All participants were 50 to 75 years old, had total PSA levels between 4 and 10 ng/mL, and digital rectal exams that were non-suspicious for cancer – men in the so-called "diagnostic gray zone."

Results showed there is a correlation between fPSA levels and the aggressiveness of the prostate cancer as indicated by pathological tumor stage and grade.

Patients with fPSA levels of 15 percent and higher were more likely to have cancer that was still confined within the prostate gland, when the disease is most treatable. They were also more likely to have a less aggressive form of prostate cancer.

Catalona said these study results build upon those of a prior study showing the fPSA test enhances the specificity of prostate cancer screening of men in the diagnostic gray zone.

That study, published last year in The Journal of the American Medical Association, found that many men in the diagnostic gray zone who have fPSA levels greater than 25 percent need not undergo painful biopsies, unless their family or medical history suggests otherwise.

The new Journal of Urology study was conducted at seven major university

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medical centers nationwide: Washington University School of Medicine, St. Louis; The Johns Hopkins Hospital, Baltimore; Baylor College of Medicine, Houston; University of Washington, Seattle; Loyola University Medical Center, Maywood, Ill; University of California Los Angeles School of Medicine, Los Angeles; and the Harvard Program in Urology, Brigham and Women's Hospital, Boston.

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