

# PSA Testing



## The key for early detection

By Jason K. Sprunger, M.D

**T**here are approximately 200,000 cases of prostate cancer diagnosed each year resulting in 30,000 deaths, making prostate cancer the second leading cause of cancer deaths in men. The discovery of PSA in the 1980s provided urologists with a simple blood test for early detection of prostate cancer. As with all forms of cancer, early detection is the key to successful treatment.

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The discovery of PSA and its clinical application has revolutionized the way prostate cancer is diagnosed, treated and managed. PSA and digital rectal exam

(DRE) are now the hallmarks of a prostate cancer early detection program. Before the discovery of PSA, prostate cancer was often diagnosed through less specific blood tests and physical exam. Often the disease was discovered at a more advanced stage.

The American Cancer Society recommends that men 50 years of age and older have a simple PSA blood test and a DRE. African Americans and men with family history of prostate cancer should begin testing at age 45. The blood test can be easily drawn in the urologist's office, and does not require the patient to be fasting.

It is generally believed that a PSA greater than 4.0 ng/ml is considered elevated and requires further investigation. Recent studies have demonstrated that age specific guidelines might be more appropriate. Men in their 50s should have PSA values less than 3.5ng/ml, 60s less than 4.0ng/ml.

Another form of PSA is called free PSA or PSA II. Most PSA in the blood is bound to serum proteins. Free PSA is the small amount that is not bound to a serum protein. The risk of cancer increases if the free to total ratio is less than 25%. Free PSA is most helpful in men with a PSA value between 4 and 10 and who have already had a negative biopsy. A free PSA less than 25% is concerning and the patient should be followed more closely.

PSA velocity is another useful tool when evaluating men for prostate cancer. Some investigators have suggested that an increase of .75ng/ml per year may indicate the presence of cancer.

The only way to diagnose prostate cancer is through a biopsy. PSA helps the urologist determine when a biopsy would be appropriate.

After a man has been treated for prostate cancer, PSA can also be very helpful in following the patient by monitoring for recurrence.

In summary, PSA is an important part of men's health screening and essential for early detection for prostate cancer. PSA is an annual blood test that can be drawn in the urologist's office. It can make all the difference in finding prostate cancer early when treatment is most effective.



**Jason K. Sprunger, M.D.** is a graduate of Wabash College, Crawfordsville, Indiana, where he was awarded the Presidential Scholarship for Academic Achievement and where he received his BA in Psychology. After pursuing graduate studies in Biology at Purdue University, he earned his medical degree from the Indiana University School of Medicine, Indianapolis, Indiana. He completed his residency in general surgery and his residency in urology at the Milton S. Hershey Medical Center, Penn State University, Hershey, Pennsylvania. While at Hershey Medical Center, Dr. Sprunger was awarded the SICU Collaborative Practice Award. He completed a fellowship in Laparoscopy and Endourology at Vanderbilt University and Medical Center, Nashville, Tennessee, where he served as an instructor in the Department of Urologic Surgery.

Dr. Sprunger is a member of the American Urologic Association, Vanderbilt Urologic Society, Endourology Society, and the American College of Surgeons. His areas of special interest include laparoscopic and endoscopic techniques in urologic surgery.