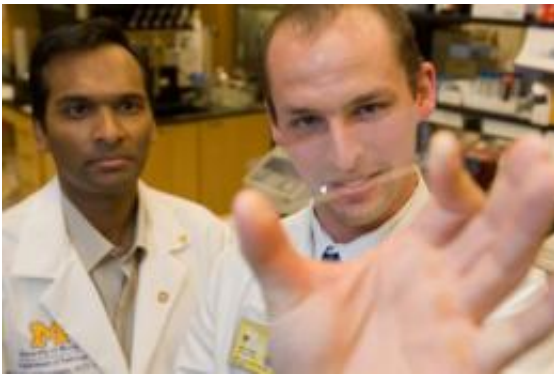


New early detection test for prostate cancer: Mi-Prostate Score test improves on PSA for predicting cancer

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Arul Chinnaiyan, M.D., Ph.D., and Scott Tomlins, M.D., Ph.D.

More than 1 million men will undergo a prostate biopsy this year, but only about one-fifth of those biopsies will result in a cancer diagnosis.

The reason is that the traditional [prostate cancer screening](#) test – a blood test to measure [prostate specific antigen](#), or PSA – does not give doctors a complete picture.

Now, the University of Michigan Health System has begun offering a new urine test called Mi-Prostate Score to improve on PSA screening for prostate cancer. The test incorporates three specific markers that could indicate cancer and studies have shown that the combination is far more

accurate than PSA alone.

"Many more men have elevated PSA than actually have cancer but it can be difficult to determine this without biopsy. We need new tools to help patients and doctors make better decisions about what to do if serum PSA is elevated. Mi-Prostate Score helps with this," says Scott Tomlins, M.D., Ph.D., assistant professor of pathology and urology at the University of Michigan.

Researchers [validated](#) the new test on nearly 2,000 urine samples. Mi-Prostate Score, or MiPS, was significantly more accurate than PSA alone for predicting cancer as well as predicting aggressive prostate cancer that is likely to grow and spread quickly.

Mi-Prostate Score developed from a discovery in the lab of Arul Chinnaiyan, M.D., Ph.D., in 2005 of a genetic anomaly that occurs in about half of all prostate cancers, an instance of two genes changing places and fusing together.

This [gene fusion](#), T2:ERG, is believed to cause prostate cancer. Studies in prostate tissues show that the gene fusion almost always indicates cancer.

The new urine test looks for the T2:ERG fusion as well as another marker, PCA3. This is combined with serum PSA measure to produce a risk assessment for prostate cancer. The test also predicts risk for having an aggressive tumor, helping doctors and patients make decisions about whether to wait and monitor test levels or pursue immediate biopsy.

"This combination test is not designed to say definitively at diagnosis whether a man has aggressive [prostate cancer](#), but it can provide a more accurate estimate of the likelihood of having cancer and the likelihood of that cancer being aggressive," Tomlins says.

Provided by University of Michigan

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