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BIOMEDICINE

Foretelling prostate cancer

This year, an estimated 334,500 men will get a dreaded diagnosis: cancer of the prostate. Often, that diagnosis will have been reached with the aid of a blood test that detects a protein called prostate-specific antigen, or PSA. As good as the PSA test is, researchers know that up to 40 percent of men with prostate cancer do not show elevated concentrations of PSA in the bloodstream. For such men, a PSA screening test offers a false picture of prostate health.

Donald J. Tindall of the Mayo Clinic in Rochester, Minn., and his colleagues hope that a blood test for a protein known as human glandular kallikrein will improve the detection of prostate cancer. Strikingly similar to PSA, the novel protein is produced by prostate cells and may play a role in the growth and metastasis of prostate cancer.

The team developed a test that identifies high concentrations of kallikrein in the bloodstream and used it on blood samples drawn from 65 men who had already been diagnosed with prostate cancer. All had tested positive on the PSA test. Ditto for the new test. Tindall reported these findings March 26 at the American Cancer Society's 39th Science Writers' Seminar in Reston, Va.

Such preliminary results suggest only that the test may be as good as PSA at detecting cancer of the prostate. Can the new blood test identify malignancies that PSA fails to find? The researchers plan to find out, Tindall says.

Having a prostate cancer screening test that identifies men with a negative or unclear PSA result would certainly be helpful, comments Donald Coffey of Johns Hopkins Medical Institutions in Baltimore. "This could be a very important tool," he says.

— *K.F*