Medical Xpress

Updated 'Partin Tables' tool now available to predict prostate cancer spread

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Prostate cancer experts at Johns Hopkins have developed an updated version of the Partin Tables, a tool to help men diagnosed with prostate cancer and their doctors to better assess their chance of a surgical cure. The updated tool, based on a study of more than 5,600 men treated at The Johns Hopkins Hospital from 2006 to 2011, is published in the Jan. 3 issue of the *British Journal of Urology International*.

"The first thing most men want to know when they learn they have prostate cancer is their prognosis - whether it can be cured," says Alan W. Partin, M.D., Ph.D., professor and director of Urology at the Johns Hopkins University School of Medicine, and creator of the Partin Tables. "The Partin Tables are a statistical model to show the probability that the cancer is confined to the prostate and therefore is likely to be cured with surgery," he says.

The model is based on a patient's prostate specific antigen (PSA) level, Gleason Score (a number from 2 to 10 that estimates the aggressiveness of tumors removed during a biopsy based on their appearance under a microscope), and clinical stage - the extent to which a tumor can be felt during a digital exam.

Treatment decisions for prostate cancer are very complex and depend on a variety of factors, including whether the cancer is confined to the prostate or whether it has spread to the edge of the gland, seminal vesicles, lymph nodes or elsewhere in the body. Data for the Partin Tables, first published in 1993, have been based on the outcomes for

more than 20,000 men who underwent prostate removal (known as radical prostatectomy) at Johns Hopkins over the past three decades. This represents the third update of the data.

"Twenty years ago, before widespread adoption of PSA for early detection, many men were diagnosed with prostate cancer after their cancer had spread. Today, the vast majority of men are diagnosed when the cancer is still confined to the prostate, giving them a much better chance of a cure with a surgical removal of the prostate," says Partin.

John B. Eifler, M.D., the lead author of the article who worked with Partin on the revision, says the new Partin Tables show that certain categories of men who were previously not thought to have a good prognosis actually could be cured with surgery. "We now have a better understanding of intermediate risk and see that more men now fall into that category, instead of the higher risk group," says Eifler.

For example, men with a biopsy Gleason Score of 8 and above previously were not thought to be good candidates for surgery because of the likelihood that the cancer had spread. The new data show a higher probability of a cure with surgery even if a man's Gleason score is 8. Scores of 9 and 10 are still considered high risk, indicating that the cancer likely has spread.

The researchers also found that having a PSA level of 10 and above was a better cut-off for predicting the spread of disease compared to lower levels.

"The updated Partin Tables will significantly improve the ability of physicians to counsel patients on the extent of their disease and help them make treatment decisions, such as whether surgery is warranted and, if so, whether lymph nodes also should be removed during surgery," Partin says. "If there is a high probability that the cancer has spread,

treatment options include radiation, chemotherapy and hormonal therapy."

To access the updated Partin Tables, go to urology.jhu.edu/prostate/partintables.php . By inputting the PSA, the Gleason Score and the clinical stage results, and clicking on "find results," an individual can see the percentage chance that the cancer is confined to the prostate, has migrated to the edge of the gland, has invaded the seminal vesicles or has spread to the lymph nodes.

Provided by Johns Hopkins University