

RNA assays up sensitivity of urothelial carcinoma detection

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(HealthDay) -- *Cxbladder*, a derivative of the RNA assay uRNA, may be an effective alternative to cytology and nuclear matrix protein 22 (NMP22) assays for the detection of urothelial carcinoma, according to a study published in the September issue of *The Journal of Urology*.

To compare the sensitivity and specificity of the RNA tests with cytology and NMP22 assays (NMP22 BladderChek and NMP22 enzyme-linked immunosorbent assay [ELISA]) using cystoscopy as the reference, Paul O'Sullivan, M.D., of Pacific Edge Ltd. in Dunedin, New Zealand, and associates conducted a prospective study of 485 patients presenting with gross hematuria with no history of urothelial cancer.

Of 66 patients with [urothelial carcinoma](#), the researchers found that uRNA detected 62.1 percent of the cases, compared with cytology (56.1 percent), NMP22 ELISA (50 percent), and BladderChek (37.9 percent). *Cxbladder* detected 82 percent of cases, including 100 percent of tumors stage 1 or greater and 97 percent of high-grade tumors. The specificity of *Cxbladder* and uRNA were prespecified at 85 percent, and the specificity of [cytology](#), NMP22 ELISA, and BladderChek were 94.5, 88.0, and 96.4 percent, respectively. *Cxbladder* was able to differentiate between low-grade Ta tumors and other detected urothelial carcinoma with a sensitivity and a specificity of 91 and 90 percent, respectively.

"uRNA and *Cxbladder* showed improved sensitivity for the detection of urothelial carcinoma compared to the NMP22 assays," the authors write. "Stratification with *Cxbladder* provides a potential method to prioritize patients for the management of waiting lists."

Several authors disclosed [financial ties](#) (including employment) to Pacific Edge Ltd., which manufactures *Cxbladder*.

More information: [Abstract](#)
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