UBC® *Rapid* is a Point of Care (POC) test for early detection of bladder cancer

UBC® *Rapid* has high sensitivity for detecteing non-invasive high-grade tumours and carcinoma in situ.

UBC® *Rapid* generally performs better than urine cytology.

UBC® *Rapid* utilizes fresh urine collected on the day of patient visit, and results can be obtained within 10 to 15 minutes.

UBC® *Rapid* is the only POC test for bladder cancer that offers quantitation.

UBC® *Rapid* can be performed on urine with micro- or macrohematuria, without impacting the result. Hematuria is the most common symptom of Bladder cancer.

Sensitivity of UBC® *Rapid*

	Sensitivity
Bladder cancer, all types	72 %
High-grade non- muscle invasive	84.5 %
Muscle invasive	76 %
Carcinoma in situ (CIS)	81 %

Ecke T., et al. BTA stat, NMP22, BladderChek, UBC Rapid Test, and CancerCheck UBC rapid VISUAL as urinary marker for bladder cancer: Final results of a German multicenter study. Urol Oncol 2023: 41: 484.e17-484.e26

Contact Us
Email: info@idldiagnostics.com
Phone: +46 (0)8 799 67 50
www.idldiagnostics.com

Follow us:
LinkedIn: idldiagnostics

References:
1. Minana B. et al. Bladder cancer in Spain 2011: population based study. J Urol. 2014;191:323-8.
2. Ritter R., et al. Evaluation of a new quantitative point-of-care test platform for urine-based detection of bladder cancer. Urol Oncol 2014; 32:337-344.
3. Styrke J., et al. Evaluation of the diagnostic accuracy of **UBC®** *Rapid* in bladder cancer: a Swedish multicentre study. Scand J Urol 2017; 51:293-300.
4. Pichler R., et al. Urinary Rapid and NMP22 test for bladder cancer surveillance in comparison to urinary cytology: Results from a prospective single-center study. Int J Med Sci 2017; 14:811-819.
5. Ecke T., et al. BTA stat, NMP22, BladderChek, **UBC®** *Rapid* Test, and Cancer Check UBC rapid VISUAL as urinary marker for bladder cancer: Final results of a German multicenter study. Urol Oncol 2023: 41: 484.e17-484.e26.
6. Lüdecke G., et al. Comparative analysis of sensitivity to blood in the urine for urine-based point-of-care assays (**UBC®** *Rapid*, NMP22 BladderChek and BTA-stat) in primary diagnosis of bladder carcinoma. Interference of blood on the results of urinebased POC tests. Anticancer Res 2012; 32:2015-2018.
7. EAU Guidelines on Non-muscle invasive bladder cancer 2024.

UBC® *Rapid*

For Bladder Cancer Detection

Version number 91-657-12

Background

Bladder cancer is a common form of cancer worldwide. The risk of developing bladder cancer is three to four times higher in men compared to women and the risk increases with smoking and exposure to carcinogens. At presentation, more than 75% of all tumors are non-muscle invasive [7], but many tumors subsequentially become muscle invasive and may metastasize to other organs.

Diagnostics

Cystoscopy and urine cytology are the most common methods for detection of bladder cancer and for assessment of recurrence. Cystoscopy is an invasive procedure that may cause pain and discomfort. Urine cytology, a non-invasive urine test, is often used as an adjunct to cystoscopy. Cytology shows high specificity but limited sensitivity. In addition to these methods, urine tumor marker tests are available. **UBC®** *Rapid* is one such test, based on the detection of cytokeratins in urine.

Detection of Cytokeratins in Carcinoma Cells with UBC® *Rapid*

During conditions of high cellular turnover, such as cancer, cytokeratins are released from disintegrated epithelial cells and can be detected in blood or urine. Cytokeratins 8 and 18 are expressed by simple epithelial cells and cancer cells of epithelial origin, including bladder cancer cells. **UBC®** *Rapid* uses monoclonal antibodies that recognize cytokeratins 8 and 18.

The performance of UBC® *Rapid* is reliable even in the presence of hematuria

Hematuria is the major initial clinical sign of bladder cancer [1]. Therefore, it is important that urine-based POC tests are not affected by hematuria.

Quantitative determination

UBC® *Rapid* is used for quantitative determination in combination with the POC-reader Concile Ω100. It is also available as a qualitative version, **UBC®** *Rapid* VISUAL, which should be read visually.

Clinical Utility and High Sensitivity of UBC® *Rapid* for Non-Invasive High-Grade Tumors and CIS

The **UBC®** *Rapid* test has been extensively documented for its effectiveness in detecting bladder cancer. It can be used for identification of primary tumors, monitoring of patients with existing bladder cancers, and to detect recurrences [2-5]. **UBC®** *Rapid* can identify malignancies missed by initial cytology/cystoscopy and detect high-risk tumors [2,4].

The performance of the **UBC®** *Rapid* POC test has been evaluated in a multicenter study [5]. **UBC®** *Rapid* showed a high diagnostic sensitivity for non-invasive high-grade tumors (84.5%). Furthermore, a diagnostic sensitivity of 81% was observed for patients with carcinoma in situ, an aggressive form of bladder cancer that is difficult to detect using cytoscopy.