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## Editorial

# TaT1 (Non-muscle invasive) Bladder Cancer

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Non-muscle-invasive bladder cancer—previously termed *superficial bladder cancer*—is a common disease that urologists are confronted with every day. Four papers in this issue by experts in the field provide the current knowledge needed to deal with this costly disease.

Recurrence rates associated with TaT1 bladder cancer remain high; therefore, treatment must aim at reducing the likelihood of recurrence as much as possible. In addition, some cancers have a definite risk of progression, and these must be identified by risk stratification.

While the primary diagnosis of bladder cancer is still usually driven by symptoms, the diagnosis of recurrence is partly based on examinations using urine. The value of urine markers and cytology is examined in detail by Bas van Rhijn and colleagues. Transurethral resection (TUR) is the method used to make a definite (histological) diagnosis of bladder cancer and is the primary treatment. Its technique and adjunctive measures are of crucial importance for the rate of recurrence, as described by Marko Babjuk. Matthew Braasch et al, in a review that is largely centered around the immunotherapy with bacillus Calmette-Guérin, analyze the indications, complications, and results of intravesical treatment. In any bladder-sparing approach in high-risk non-muscle-invasive cancer, intravesical treatment is of utmost importance. Understanding what the risk strategy is and also how to deal with treatment failures is critical. Van der Heijden and Witjes review the current knowledge about the known risk factors of non-muscle-invasive bladder cancer, epidemiological as well as molecular and genetic, that impact the risk of recurrence and progression with different treatment strategies. They discuss the European Organization for Research and Treatment of Cancer risk tables as well as the follow-up strategies that are currently recommended.

Frequent recurrences, instillations, and the necessity of frequent follow-up account for the fact that TaT1 bladder cancer is a fairly expensive disease; its burden on health care systems is substantial. The different reviews all highlight the crucial importance of high-quality primary TUR, which is often less than adequate, as evidenced by the high rate of persistent disease in series of secondary TUR and also of the high rate of “recurrence” noted in many series at the 3-mo cystoscopy, when secondary TUR is not routine. The quest to reduce invasive follow-up has two sides: development of reliable urine marker tests, and better risk stratification. Both the reviews on urine-based diagnosis and the one on follow-up strategies conclude that markers are not yet reliable enough and that cytology remains the most useful urine-based test. However, proper risk stratification can indeed be used to provide a risk-adapted follow-up regimen, based, for example, on the EORTC risk tables.

Thus, there are, I believe, definite ways we can improve on our care for “superficial” bladder cancer: high-quality TUR, routine use of one early perioperative instillation, routine use of secondary TUR (except for unifocal TaG1 tumors), and a risk-adapted follow-up based on the primary stage and grade plus the first 3-mo follow-up cystoscopy. I believe that using these techniques can reduce the high recurrence rate of bladder cancer, spare patients unnecessary cystoscopies, and reduce health care costs.

Of great importance when following a bladder-sparing strategy in high-risk patients is knowing when this approach should be abandoned in favor of radical treatment. This important issue is discussed in detail in the review by Matthew Braasch and colleagues.