## Smart communication (SC9–SC18) Non-muscle invasive bladder cancer

Smart Communications	Title
SC9	Predictors of residual tumor at re-staging transurethral resection for high-risk non-muscle invasive bladder cancer
SC10	Investigating the spread of en bloc resection for bladder cancer in daily practice among IEA and ESUT members
SC11	Survival outcomes after radical cystectomy versus conservative management for T1 high grade non-muscle invasive micropapillary bladder cancer: a multicentre collaboration by the European Association of Urology – young academic urologists (EAU-YAU): urothelial carcinoma working group
SC12	Active surveillance in low-grade non-muscle-invasive bladder cancers. Results after 8 years of bladder cancer Italian Active Surveillance (BIAS) project
SC13	Reducing the frequency of surveillance cystoscopies through the use of ADXBLADDER in the follow up of patients with non-muscle invasive bladder cancer
SC14	Skeletal muscle loss predicts oncological outcomes in T1HG patients treated with adjuvant intravesical BCG: implications for decision-making?
SC15	En-bloc versus conventional transurethral resection of bladder tumors: interim analysis of a single-center prospective randomized trial
SC16	Long-term oncological outcomes of bladder carcinoma in situ (CIS) treated with BCG immunotherapy: prognostic implications of 6-month pathological response assessed by a propensity score matching analysis
SC17	The impact of urinary retention on the short-term response to treatment of non-muscle invasive bladder cancer (NMIBC)
SC18	Impact of clinical and pathological subtypes of carcinoma in situ (CIS) of the bladder: lessons learned from long- term follow-up of a series of CIS patients treated with BCG

SC9

Predictors of residual tumor at re-staging transurethral resection for high-risk non-muscle invasive bladder cancer

F. Traunero, F. Claps, P. Vogrig, G. Liguori, N. Pavan, F. Vedovo, C. Trombetta, (Trieste)

**Author of the Study:** Re-staging transurethral resection of bladder tumor re-TURBt is nowadays considered the gold-standard treatment for patients with non-muscle invasive bladder cancer (NMIBC) harboring high-risk features. Although the rationale behind it's well established in the current guidelines, it must be considered its potential morbidity, procedure-related costs and the need of general or locoregional anesthesia. To assess a risk-adapted strategy, we analyzed the role of clinicopathological, laboratory and surgical predictors of residual tumor at the time of re-TURBt in a single-Institution series of T1 NIMIBC.

**Materials and Methods:** A prospectively maintained internal database was queried. Data about 114 consecutive patients who underwent re-TURBt for T1 NMIBC were analyzed. Binomial logistic regression models were applied to evaluate residual tumor predictors. Step

function was used to select the best model according to the Akaike Information Criterion (AIC).

Results: Of these 114 patients, 97 were men (85.1%) and 17 were women (14.9%). The median age of the participants at the time of the interventions was 73 years (IQR 68-79). Regarding smoking habits, 36 patients were no smokers (31.6%), 47 were former smokers (41.2%), and 31 were active smokers (27.2%). The Charlson Comorbidity Index (CCI) was  $\geq 2$  in 53 cases (46.5%), 1 in 35 cases (30.7%) and 0 in the remaining 26 (22.8%). In 48.2% of cases, the tumor was multifocal. Detrusor muscle was present in 97 (81,5%) samples of the first TURBt. Residual tumor was present in 40 (35.1%) patients. Pathological stage at re-TURBt was pTa in 7.9%, pT1 in 23.7% and pT2 in 3.5% of cases. In the remaining 40 patients with residual disease, the histologic stage of the lesion was pTa in 7.9%, pT1 in 23.7% and pT2 in 3.5% of cases. In 19.3% of patients, a high-grade tumor was found at re-TURBT. After multivariate binomial logistic regression analysis, we observed that age (OR 1.05; 95% CI 1.01-1.11; p = 0.02), previous history for bladder neoplasm (OR 3.14; 95% CI 1.10-11.10; p = 0.04), presence of preoperative anemia (OR 5. 4; 95% CI 1.36–9.65; p = 0.02), preoperative platelet count (OR 1.01; 95% CI 1.00-1.01; p=0.02), preoperative high neutrophil-to-lymphocyte ratio (NLR) (OR1.23; 95% CI 1.01-1. 55; p = 0.05), training level of the surgeon (OR 0.09; 95% CI 0.01-0.42; p = 0.01), and tumor grading (OR 2.71; 95% CI 1.14–8.43; p = 0.04) were

independently associated with outcome. The Area Under the Curve (AUC) of the model was 0.80.

**Conclusions:** Increasing age, preoperative anemia, impaired neutrophil-to-lymphocyte ratio, and high-grade tumor at first TURBt were independent risk factors for residual tumor at re-TURBt. These initial Results may allow a more accurate selection of patients to be considered for re-TURBt. Further investigations are needed.

SC10

Investigating the spread of en bloc resection for bladder cancer in daily practice among IEA and ESUT members

G. Bonfante, S. Ciarlariello, L. Sarchi, T. Calcagnile, S. Assumma, B. Filippi, A. Pescuma, J. Rassweiler, A.S. Gozen, S. Silay, S. Puliatti, A. Eissa, G. Bozzini, M.C. Sighinolfi, G. Bianchi, B. Rocco, S. Micali, (Modena)

**Author of the Study:** En bloc resection of bladder cancer (ERBT) was introduced more than 23 years ago. However, the number of RCTs on this topic is still limited and ERBT represents an area of uncertainty due to the lack of standardization in practice patterns and indications of this procedure. Moreover, following the literature, a large number of European urologists rarely or never use this techniqueThe aim of the study is to evaluate the use of ERBT in daily practice of urologists affiliated to the Italian Endourological Association (IEA) and the EAU Section of Uro-Technology (ESUT) through a web-based survey.

**Materials and Methods:** In March 2020, an 18-items survey aiming to assess the use of ERBT in the real-life daily practice was designed in accordance with the CHERRIES guidelines. The questionnaire was designed and reviewed by two senior and experienced endourologists. It was administrated members of the IEA and ESUT.

Results: Between March and April, a total of 118 memebers of IEA and ESUT completed the survey. The majority of respondents were aged between 30 and 49 yr and had >10 yr of clinical practice. 66% started performing lower urinary tract endoscopy more than 10 years ago and many of them (54%) are working in high-volume hospitals (≥200 TURBT/year). 81% of the included urologist routinely perform ERBT. Nearly all the urologists performing ERBT agreed to carry out this technique in case of exophytic lesions (99%), while only 60% used this technique for flat lesions as well. Three centimeters is considered to be the maximum lesion size suitable for ERBT by 41% of the sample, while 19% considered it feasible also for lesions.

>3 cm. On the other hand, 19% (22/118) of the respondents reported that they do not perform ERBT in their daily practice for several reasons, the most important is difficulties in tumor extraction. Tumour extraction is made by flushing (73%), grasper (43%), endobag (11%) and resectoscope loop (9%). In their opinion (53%) the major advantages are the higher rate of muscle layer presence and the possibility to have a more exhaustive pathological report. Although 51% consider the presence of lateral margins relevant, in 39% of the cases the pathologist does not provide data on lateral mucosa status. The assessment of lateral margins is not well-established, in fact only 10 urologists confirm to obtain this information in ≥75% of the histopathological examinations. Although 41% of urologists have started ERBT from  $\leq 3$ years, only one urologist managed major complications (Clavien-Dindo Classification  $\geq 3$ ). The most widely used source of energy is monopolar current (87%), followed by bipolar current (40%), while only 38% use laser energy, in particular Thulium-YAG laser.

**Conclusions:** ERBT represents a safe and feasible alternative technique for treating NMIBC. However, our survey showed that less than 50% of

IEA and ESUT members who perform ERBT choose en-bloc resection over conventional transurethral resection of bladder tumor (TURBT) when feasible. Difficulties in specimen's retraction seems to be the most important reasons for not performing ERBT, which reflects the importance of proper designed training program.

SC11

Survival outcomes after radical cystectomy versus conservative management for T1 high grade non-muscle invasive micropapillary bladder cancer: a multicentre collaboration by the European Association of Urology – young academic urologists (EAU-YAU): urothelial carcinoma working group

C. Lonati, P. Baumeister, L. Afferi, A. Mari, A. Minervini, W. Krajewski, K. Hendricksen, F. Montorsi, A. Briganti, R. Colombo, A. Antonelli, M. Rouprêt, A. Masson-Lecomte, S.F. Shariat, D. D'Andrea, F. Soria, R. Hurle, M.C. Mir, S. Zamboni, C. Simeone, T. Klatte, J.Y. Teoh, G.B. Schulz, A. Mattei, M. Moschini, (Brescia)

**Author of the Study:** At present no clear indication exists regarding the optimal treatment for non-muscle invasive micropapillary bladder cancer (NMI-MPBC). We compared cancer-specific survival (CSS) and overall survival (OS) after immediate radical cystectomy (RC) vs. conservative management for T1 MPBC.

Materials and Methods: We retrospectively analyzed data of 121 T1 high grade NMI-MPBC patients treated between 2005 and 2019 at 15 tertiary referral centers, who underwent immediate RC vs. conservative management, including BCG immunotherapy or second- transurethral resection of bladder. First, we analyzed CSS and OS between the two therapeutic strategies; second, we assessed recurrence-free survival (RFS) and progression-free survival (PFS) among patients conservatively treated. Survival analyses were performed using Kaplan-Meier and compared with log-rank test.

Results: Immediate RC and conservative management were performed in 15.7% and 84.3% of patients, respectively. Median follow up time was 35 months (interquartile range: 19-62). Overall, 3-year CSS and OS were 47% vs. 58% (log-rank p = 0.2) and 47% vs. 59% (log-rank p = 0.1) for patients treated with immediate RC vs. conservative management. Overall, 57% and 41% of patients conservatively treated experienced respectively tumor recurrence and progression, with 1year RFS and PFS of 23% and 47%. Among patients experiencing tumor recurrence, those who underwent delayed RC showed 3-year CSS of 65% compared to 29% of those who continued a conservative approach despite recurrence (log-rank p < 0.001). Overall, 48 patients underwent delayed RC after conservative management failure. Immediate and delayed RC cohorts showed 2-year RFS rates of 92% and 49% (logrank p = 0.015). No significant differences in 3-year CSS and OS were observed among patients treated with immediate vs. delayed RC (logrank p = 0.2 and 0.1, respectively).

**Conclusions:** Bladder preservation through a conservative management seems an effective therapy in T1 MPBC patients recording similar survival outcomes to those observed after immediate RC. In case of tumor recurrence after conservative management, switching to delayed RC was found superior to a further maintained conservative management. In absence of trials evaluating the optimal treatment of this rare disease, our study represents the largest series available in the literature and should be taken in consideration when evaluating the best therapy to be performed.