Clinical Reliability on EORTC Risk Tables for Recurrence of Non-Muscle Invasive Bladder Cancer in Japanese Patients

Introduction and Objective: To evaluate European Organization for Research and Treatment of Cancer (EORTC) risk tables for recurrence on non-muscle invasive bladder cancer (NMIBC) in Japanese patients.

Materials and Methods: One thousand three hundred fifty-seven cases of 583 Japanese patients with NMIBC were retrospectively analysed. All patients underwent transurethral resection of bladder tumor (TURBT) in a single institution between 1990 and 2008. The EORTC risk scoring system was used for risk group stratification. Recurrence-free survival was examined using Kaplan-Meier method. Results: Of 1357 cases, one immediate instillation of chemotherapy following TURBT underwent in three cases. Thirty-three cases (2.4%) were treated with induction intravesical chemotherapy as adjuvant treatment, and 112 cases (8.3%) with induction intravesical BCG. One thousand one hundred ninety cases (87.7%) have not received any adjuvant treatment following TURBT. On risk group stratification, 84 (6.3%), 550 (40.5%), 676 (49.8%), 46 (3.4%) were classified into low-, intermediate-low-, intermediate-high, and high-risk groups, respectively. On recurrence-free survival, median observation period in cases without recurrence was 44.2 months. Recurrence-free survival rates at 1 and 5 year in each group were 21% and 33% in low-, 37% and 63% in intermediate-low-, 55% and 77% in intermediate- high-, 48% and 79% in high-risk group, respectively. There was no statistical difference in recurrence-free survival between that in intermediate-high-risk group and high-risk group in Japanese patients with NMIBC.

Conclusions: We supposed that recurrence rate of intermediate-high-risk group was same as high-risk group in our cohort, because most of patients in intermediate-high-risk group have not been treated with adjuvant intravesical therapy. EORTC risk tables for recurrence will be useful in Japanese patients with NMIBC.