OUTCOMES WITH CISPLATIN-BASED FIRST-LINE THERAPY FOR ADVANCED UROTHELIAL CARCINOMA (UC) FOLLOWING PREVIOUS PERIOPERATIVE CISPLATIN-BASED THERAPY


1Medical Oncology, University of Alabama at Birmingham Hospital, Birmingham, AL, USA
2Medical Oncology/urology Unit, Fondazione IRCCS - Istituto Nazionale dei Tumori, Milan, ITALY
3Dept. Genitourinary, Fondazione IRCCS - Istituto Nazionale dei Tumori, Milan, ITALY
4Genitourinary Cancer Section and Rare-cancer Center, University Federico II, Naples, ITALY
5Oncology, British Columbia Cancer Agency, Vancouver, BC, CANADA
6Medical Oncology and Experimental Therapeutics, City of Hope Cancer Center, Duarte, CA, USA
7Huntsman Cancer Institute, University of Utah, Salt Lake City, UT, USA
8Karmanos Cancer Center, Wayne State University, Detroit, MI, USA
9Urologic Oncology, Heinrich Heine University, Dusseldorf, GERMANY
10Molecular and Clinical Cancer Medicine, University of Liverpool, Liverpool, UK
11Oncology, University of Arizona, Tucson, AZ, USA
12Medical Oncology, Bladder Cancer Center, Dana-Farber/Brigham and Women’s Cancer Center, Harvard Medical School, Boston, MA, USA
13Biostatistics, Ontario Clinical Oncology Group and McMaster University, Hamilton, ON, CANADA

Aim: Outcomes with cisplatin-based first-line therapy for advanced UC following previous perioperative cisplatin-based chemotherapy are unclear. We conducted a retrospective study to evaluate outcomes and identify a threshold of time from prior cisplatin-based perioperative chemotherapy (TFPC) when repeating cisplatin-based chemotherapy may not be justified.

Methods: Data were collected for patients who received cisplatin-based first-line therapy for advanced UC following previous perioperative cisplatin-based therapy. The Kaplan-Meier method was used to estimate survival. Cox proportional hazards models were used to investigate the prognostic ability of variables on overall survival (OS). The multivariable model included patients with complete data for the all factors (visceral metastasis, ECOG performance status [PS], TFPC, anemia, leukocytosis, albumin). All tests and confidence intervals were two-sided and at p = 0.05 level of significance.

Results: Individual level data for 40 patients from 8 institutions were obtained. The study included 33 men (77.5%), the median age was 61 years (range 41 to 71), the majority received gemcitabine plus cisplatin (N = 25, 62.5%) and the median number of cycles was 4 (range 1-8). The median OS was 70 weeks (95% CI: 48.0-81.0). Multivariable Cox regression analysis results showed an independent prognostic impact on OS for PS >0 vs. 0 (HR 4.34 [1.52-12.36], p = 0.006) and TFPC ≥1.5 years vs. <1.5 years (HR 0.44 [0.20-0.99], p = 0.046). Other cutoffs for TFPC (1 or 2 years) did not attain statistical significance, but these analyses may have been limited by small sample size. Patients with TFPC <1 year demonstrated the poorest median survival of ~9 months.

Conclusions: Longer TFPC ≥1.5 years and ECOG-PS = 0 were independently prognostic for better survival with cisplatin-based first-line chemotherapy for advanced UC following prior perioperative cisplatin-based chemotherapy. The present analysis supports employing >1 year from prior perioperative cisplatin-based chemotherapy to re-challenge with cisplatin-based first-line chemotherapy for metastatic disease.

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