

Sequential Chemotherapy with Gemcitabine Plus Carboplatin, Followed by Additional Docetaxel for Aged Patients with Advanced Bladder Cancer

Introduction and Objective: We retrospectively evaluated the feasibility and effectiveness of a sequential chemotherapy without cisplatin for the patients 70 years or older with advanced bladder cancer.

Materials and Methods: Forty-seven patients with advanced bladder cancer (33 men and 14 women) with the age of 70 years or older were enrolled. They were treated at our clinic between August 2004 and December 2010. Their average age was 80.0 years old (70–86), average Ccr was 37.0 ml/min (14.5–113.0), and an average follow-up period was 17.4 months (10–55). There were 15 recurrent cases after radical surgery and 32 inoperable cases (T4b or metastatic). As for prior chemotherapy, 6 underwent MVAC therapy. The therapeutic regimen consisted of 2 lines: gemcitabine/carboplatin (GC) therapy as the first line, with two courses as a set; GC/docetaxel (GCD) therapy as the second line if the response in the first line was insufficient. GC consisted of 800mg/m² gemcitabine on days 1, 8, and 15 and carboplatin (AUC 4) on day 2. If this regimen was effective, another 2 courses of GC was performed. If this regimen did not induce any tumor size reduction, we switched to GCD, which consisted of 800mg/m² gemcitabine on days 1 and 8, 70mg/m² docetaxel on day 1, and carboplatin (AUC 3) on day 2. Treatment efficacy was checked every 2 course according to the RECIST version 1.1.

Results: Of the 47 subjects who had undergone the GC therapy, the response rate was 38.3% (CR+PR) with 5 and 12 subjects exhibiting a complete response (CR) and a partial response (PR), respectively; the average response duration was 15.7 months (2–42). Of the subjects with MVAC resistance, 1 exhibited a CR and 3 showed a PR. The response rates of 9 instances of GCD was 11.1%; the overall median survival was 15.0 months throughout the sequential chemotherapy. Adverse events (AE) of grade 3 or higher occurred in 30 of those who had undergone the GC therapy (63.8%). Bone marrow suppression was observed in 30 subjects (61.7%), whereas only 3 (9.0%) developed digestive symptoms. No subjects experienced the deterioration of their renal functions.

Conclusion: Although the present study is small and preliminary, the present sequential chemotherapy is safe and active for advanced bladder cancer of the patients seventy years or older. GC regimen achieved relatively high response rate (38.3%) in advanced bladder cancer including M-VAC-resistant case. The median overall survival of 15 months is acceptable when average age of 80 year for the subjects is taken into consideration. However, GCD had limited effectiveness for non-responder of GC.