

## **Oncological Outcome of Docetaxel plus Prednisolone for the Treatment of Metastatic Castration-Resistant Prostate Cancer**

**Introduction and Objective:** Several data showed significant differences between races in the features of prostate cancer and the pharmacokinetics of drug clearance, which would influence the outcome of docetaxel plus prednisolone chemotherapy. We retrospectively reviewed the oncologic outcomes of docetaxel plus prednisolone chemotherapy in Korean men with metastatic castration-resistant prostate cancer (mCRPC).

**Materials and Methods:** This study included 106 consecutive Korean patients with mCRPC who were treated with 3-weekly docetaxel plus prednisolone chemotherapy between January 2005 and December 2011. The oncologic results and prognostic significance of several clinicopathologic factors in these patients were analyzed.

**Results:** In the 106 patients, the median age and serum value of prostate-specific antigen (PSA) prior to docetaxel plus prednisolone chemotherapy were 67 years and 93.0ng/ml, respectively. Of these patients, 70 (66.0%) were received docetaxel as the first line chemotherapy. There was a 50% reduction in PSA and objective response in measurable lesion observed in 45 (48.9%) and 14 (17.9%) patients, respectively. Median follow-up time was 26.5 months. The median progression-free survival and overall survival (OS) were 6.0 and 16.0 months, respectively. Of several factors examined, multivariate analysis identified good performance status (PS) and first line setting predict longer OS. The median OS of the patients in the first line (n=70) and second line (n=36) setting was 23.0 versus 11.0 months [hazard ratio (HR) 2.485, 95% confidence interval 1.558-3.966, P=0.000] (Figure 1). The survival rates in the first line at 12 and 24 months were 73.8% and 47.2%, respectively.

**Conclusions:** Korean patients that received docetaxel chemotherapy showed a relatively long survival outcome especially in the first line setting. A prospective study including genetic background associated with the prognosis of mCRPC patients might be required.

Figure 1. Overall survival of 106 patients with metastatic castration-resistant prostate cancer who received docetaxel plus prednisolone chemotherapy according to chemotherapy setting

