

Outcomes of Dose-Attenuated Docetaxel in Asian Patients with Castrate-Resistant Prostate Cancer

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Abstract

Introduction: High levels of toxicities have been observed when docetaxel is administered at the standard dose of 75 mg/m² every 3 weeks (Q3W) in the real-world treatment of Asian patients with metastatic castrate-resistant prostate cancer (CRPC). This study aimed to evaluate the efficacy and tolerability of 2 attenuated regimens more widely used in an Asian setting to minimise toxicity – 60 mg/m² Q3W and weekly docetaxel (20 mg/m² to 35 mg/m²). **Materials and Methods:** Medical records of 89 CRPC patients between December 2003 and April 2013 were reviewed. Pairwise statistical analysis was performed, comparing efficacy and safety outcomes of 75 mg/m² Q3W and weekly docetaxel with 60 mg/m² Q3W. Treatment endpoints used were prostate-specific antigen (PSA) response (decrease of ≥50% from baseline), pain improvement after cycle 2, overall survival, time to disease progression and radiological response. **Results:** Patients who received docetaxel at 75 mg/m² Q3W were younger than those who received 60 mg/m² Q3W (62 years and 66 years, respectively; *P* = 0.0489). Both groups had similar response rates. Compared with patients on 60 mg/m² Q3W, more patients on weekly regimens were symptomatic at baseline (63.2% and 87.5%, respectively; *P* = 0.0173). Longer overall survival was observed in the 60 mg/m² Q3W arm than the weekly docetaxel arm (16.9 months and 10.6 months, respectively; *P* = 0.0131), though other measures of response did not differ significantly. **Conclusion:** Our data supports the use of 60 mg/m² Q3W docetaxel which has similar efficacy and an acceptable toxicity profile compared to the standard 75 mg/m² Q3W regimen. Weekly docetaxel has significant palliative benefits among symptomatic patients despite lower overall survival.

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