Addition of docetaxel to first-line long-term hormone therapy in prostate cancer (STAMPEDE): Long-term survival, quality-adjusted survival, and cost-effectiveness analysis.

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Abstract Disclosures

Background:
Results from large randomised controlled trials have shown that adding docetaxel to standard of care (SOC) in men initiating hormone therapy for prostate cancer prolongs survival for those with metastatic disease and prolongs time to treatment failure for those without metastatic disease. We report on the impact of docetaxel on health related quality of life (HRQoL), resource use and cost-effectiveness for men treated in the STAMPEDE trial.

Methods:
Health outcomes and costs in the UK NHS were modelled using EuroQol (EQ-5D) and resource use data collected within the STAMPEDE trial (STAMPEDE enrolled men advanced prostate cancer starting first line hormone therapy. SOC was hormone therapy for ≥2 years and radiotherapy in some patients. Docetaxel (75 mg/m2) was administered alongside SOC for six 3-weekly cycles with prednisolone 10 mg daily. Lifetime predictions of costs, changes in predicted survival duration, quality adjusted life years (QALYs), and incremental cost effectiveness ratios (ICERs) were calculated.

Results:
Compared to patients allocated SOC, docetaxel was estimated to extend predicted survival by an
M0 patients were driven by the beneficial effect of delayed and reduced relapse. Docetaxel was cost-effective both in M1 patients (ICER = £5,514/QALY vs. SOC) and M0 patients (higher QALYs, lower costs vs. SOC). The probabilistic sensitivity analysis indicated a very high probability (> 99%) that docetaxel is cost-effective in both M0 and M1 patients. Docetaxel remained cost effective in M0 patients even when no survival advantage was assumed due to reductions and delays in relapse.

**Conclusions:**

Docetaxel improves overall HRQoL, delays time to, and reduces the need for, subsequent therapy, and is cost-effective, amongst patients with both non-metastatic and metastatic disease. Clinicians should consider whether the evidence is now sufficiently compelling to support docetaxel use in non-metastatic patients. Clinical trial information: ISRCTN78818544.