SYSTEMATIC REVIEW OF EFFICACY OUTCOMES REPORTED IN RANDOMISED CONTROLLED TRIALS OF FIRST-LINE (1L) THERAPIES FOR METASTATIC BREAST CANCER (MBC)  

OBJECTIVES: To determine the epidemiology of castration-resistant prostate cancer (CRPC). METHODS: Primary care data for males aged ≥40 years with a diagnosis of prostate cancer (PC) based on the Read classification were selected from The Health Improvement Network (THIN) between 1998 and 2008. Patients with CRPC were defined by a Read code indicative of medical/surgical castration and evidence of increasing levels of prostate specific antigen (PSA) following hormone/androgen therapy. Incidence and mortality rates were based on persons at risk. Survival was estimated using Cox regression analyses. To compare survival between CRPC and non-CRPC, non-CRPC controls were matched by age, year of diagnosis and baseline survival. RESULTS: Between 2003/2007, 8,678 patients with PC were identified. Incidence was 22.4 per 10,000 patient years and prevalence was 153.0 per 10,000 patients. 969 patients (11.2%) progressed to CRPC. Amongst patients with PC the prevalence was 1,530 per 10,000 cases. Rate of first recorded metastases was 34.4 per 1,000 patient years for CRPC compared with 24.8 for non-CRPC. Following CRPC onset, the mortality rate was 21.2 per 1,000 patient years compared with 86.7 per 1,000 for non-CRPC. Based on matched data, the hazard ratio for CRPC relative to non-CRPC was 2.61 (p < 0.001). Extrapolated to the UK the data from this study would predict approximately 220,000 prevalent cases of PC, 7,000 CRPC and 2,400 CRPC with recorded metastatic spread. Similarly the annual incidence would predict approximately 37,000 PC, 8,400 CRPC and 820 CRPC with recorded metastatic spread. CONCLUSIONS: The extrapolated prevalence and incidence estimates of PC are comparable to other studies in the UK. CRPC status was associated with a significantly greater rate of metastases and mortality. Due to the reliance on PQA readings in defining CRPC status it is acknowledged that we may underestimate the incidence of CRPC.