

DRUG UTILIZATION AND COSTS FOR ERYTHROPOIETIS STIMULATING AGENTS IN ADULT PATIENTS WITH CHRONIC KIDNEY DISEASE IN MANAGED CARE

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The purpose of this study was to examine recent epoetin alfa (EPO) and darbepoetin alfa (DARB) treatment patterns and corresponding drug costs in adult patients with chronic kidney disease (CKD) not on dialysis. A medical claims analysis was conducted from 01/2006 through 06/2008 using the Ingenix Impact National Managed Care database. Patients included in the study were ≥ 18 years, had ≥ 1 claim for CKD, were newly initiated on EPO or DARB, and received ≥ 2 doses. Patients diagnosed with cancer, receiving chemotherapy, or treated with both agents were excluded. If a patient had received renal dialysis, data were censored 30 days prior to the first date of dialysis. Mean cumulative dose was used to calculate drug costs, based on October 2008 wholesale acquisition unit prices (EPO \$13.77/1,000 Units; DARB \$4.818/mcg). The study population consisted of 829 patients who received EPO and 556 patients who received DARB. The EPO group was slightly older (EPO 63.4 years, DARB 61.0 years; $p=0.0011$) with less women (EPO 48%, DARB 54%; $p=0.0159$), compared to the DARB group. Mean treatment duration was similar in both groups (EPO 100 days, DARB 98 days; $p=0.7902$). The mean weekly dose weighted by treatment duration (SD) was 11,532 (11,002) Units for EPO and 50 (38) mcg for DARB, resulting in a dose ratio of 231:1 (Units EPO: mcg DARB). The mean cumulative dose (SD) was 163,974 (164,706) Units for EPO and 695 (691) mcg for DARB, resulting in a dose ratio of 236:1. Based on cumulative doses, drug cost was 33% lower for EPO than for DARB (EPO \$2,258; DARB \$3,348; $p<.0001$). After adjusting for age, gender, treatment duration, dialysis, payor type, site of treatment initiation, diabetes, hypertension, and Charlson Comorbidity Index, cumulative drug cost remained \$1,019 lower for EPO than for DARB. This study of CKD patients not on dialysis reported significantly lower drug cost in the EPO group compared to the DARB group and a cumulative dose ratio of 236:1.