

ASSESSMENT OF DRUG UTILIZATION PATTERNS AND COSTS FOR ERYTHROPOIETIC STIMULATING AGENTS IN PATIENTS WITH CHRONIC KIDNEY DISEASE

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This analysis aimed to examine recent epoetin alfa (EPO) and darbepoetin alfa (DARB) treatment patterns and corresponding drug costs in CKD patients not receiving dialysis. A medical claims analysis was conducted from 1/2004 through 06/2007 using the Ingenix Impact National Managed Care Database. Patients included in the study were ≥ 18 years, had ≥ 1 claim for CKD, and were newly initiated on EPO or DARB and received ≥ 2 doses. Patients diagnosed with cancer or receiving chemotherapy were excluded. Mean cumulative dose was used to calculate drug costs based on October 2007 wholesale acquisition unit prices (EPO \$12.52/1,000 Units; DARB \$4.628/mcg). The study population consisted of 1,110 patients who received EPO and 723 who received DARB. The EPO group was older (EPO 63.4 yrs, DARB 61.7 yrs, $p=0.006$) with less women (EPO: 48%; DARB: 53%, $p=0.028$), compared to the DARB group. Mean treatment duration was slightly longer for the EPO group (EPO 71 days, DARB 63 days, $p=0.025$). Extended dosing frequency (defined as every 2 weeks or greater, $\geq Q2W$) during treatment was observed in the majority of patients in both groups (EPO – QW: 33%, Q2W: 42%, Q3W: 13%, $\geq Q4W$: 12%; DARB – QW: 9%, Q2W: 50%, Q3W: 19%, $\geq Q4W$: 22%). The mean cumulative dose was $148,951 \pm 151,377$ Units for EPO and 552 ± 482 mcg for DARB, resulting in a dose ratio of 270:1 (Units of EPO: mcg of DARB). Based on these doses, drug cost was 27% less for EPO than for DARB (EPO \$1,865; DARB \$2,554; $p<.0001$). After adjusting for confounding factors, drug cost of EPO remained significantly lower than DARB. These findings resulted in a dose ratio of 270:1 (Units EPO:mcg DARB). Results of this analysis, based on actual recent clinical practice, are similar to those reported in previously published observational studies of CKD patients not on dialysis receiving erythropoietic stimulating agents.