CANCER

CANCER—Clinical Outcomes Studies

EPOETIN ALFA AND DARBEPOETIN ALFA ANEMIA TREATMENT OUTCOMES IN CANCER PATIENTS FROM A VA PERSPECTIVE

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OBJECTIVES: To compare dosing and treatment outcomes in patients with cancer receiving epoetin alfa (EPO) and darbepoetin alfa (DARB). METHODS: Records across several clinical and administrative data systems from adults receiving care in outpatient VA practice settings were reviewed. Eligible patients were required to have a cancer diagnosis, be ≥18 years, and have a record of treatment with EPO or DARB for anemia (hemoglobin (Hb) ≤11 g/dL). RESULTS: A total of 2159 patients (1267 EPO, 892 DARB) were identified from November 2002–August 2003. Baseline characteristics such as age, gender, weight, tumor type, percent receiving chemotherapy, baseline Hb, ECOG status, transfusion use, and iron supplementation across groups were all similar. Mean treatment duration was approximately 9 weeks (EPO: 57 days, DARB: 68 days). Mean weekly doses were: EPO 35,337 IU, DARB 108 mcg. Mean cumulative doses were: EPO 286,040 IU, DARB 1036 mcg. Based on average wholesale price (AWP, Red Book 2003), weekly and cumulative treatment costs were lower for EPO (EPO: $472/week, $3820/episode; DARB: $539/week, $5170/episode; respectively). Hb change from baseline independent of observed transfusion was significantly greater for EPO compared to DARB at all assessments (Wk 4: 0.56 vs. 0.33 g/dL, p < 0.0001; Wk 8: 0.76 vs. 0.46 g/dL, p < 0.0001; Wk 12: 0.93 vs. 0.64 g/dL, p < 0.0001; respectively). Cumulative hematologic effect, assessed by area under the Hb change curve, was also greater for EPO (7.2 vs. 4.5 g/dL). CONCLUSIONS: Results show greater early and overall hematologic outcomes with EPO compared to DARB at lower treatment costs suggesting dominance.

IMPACT OF CHEMOTHERAPY-INDUCED DIARRHEA ON MANAGEMENT PATTERNS AND RESOURCE UTILIZATION AMONG CANCER PATIENTS: RESULTS FROM A MULTI-SITE STUDY

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OBJECTIVES: Diarrhea is a significant dose-limiting toxicity associated with chemotherapy treatment among cancer patients. The objective of this study was to describe the demographic, clinical, and management pattern characteristics of patients who experience chemotherapy-induced diarrhea (CID) and assess the impact of CID on resource utilization. METHODS: We conducted a retrospective chart review of 378 cancer patients, d18 years, who experienced diarrhea during their chemotherapy treatment between 2000 and 2003 from 25 community oncology centers throughout the US. Demographic characteristics, severity of diarrhea, and changes to chemotherapy treatment due to diarrhea were evaluated using descriptive analysis. Comparisons of planned chemotherapy therapy versus actual chemotherapy received by patients due to diarrhea and impact of CID on anti-diarrheal medications, inpatient hospitalization and outpatient visits were examined. RESULTS: Patients enrolled were mostly white (80%) and middle-aged (mean 67 years). The most common chemotherapy regimen received was 5-fluorouracil intravenous push + leukovorin (27%). There was a mean of 3.9 diarrhea episodes per patient. Patients who experienced CID underwent significant changes in their chemotherapy treatment, including dose reductions (45%), delays in therapy (71%), and reduction in dose intensity (64%). Treatment with anti-diarrheal medications was done largely at home (74.9%) followed by during office visits (29.6%). Forty-four percent (n = 166) of the study population had at least one CID related outpatient visit. Mean number of outpatient visits for CID per patient was 2.5 ± 2.5. Fifty-six patients (14.8%) experienced a CID-related hospitalization during the study time frame. CONCLUSIONS: The study results showed that a significant number of patients experiencing CID required changes (usually reductions) to their chemotherapy treatment, which may ultimately impact patient clinical outcomes. CID also had a substantial impact on resource utilization, which may translate into a considerable economic burden.

Abstracts

PCN2

IMMUNITY AGAINST HUMAN PAPILLOMAVIRUS 16/18

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OBJECTIVES: To assess the comparative clinical benefits associated with HPV 16/18 vaccination when different assumptions are made about the duration of efficacy and the natural history of detectable HPV 16/18 in women over 30. METHODS: A computer-based model of cervical cancer simulates HPV 16/18 vaccination in a cohort of 12 year olds. We evaluated the impact of waning after 5, 10, and 15 years on the effectiveness of a vaccine that prevents 90% of persistent HPV 16/18 using alternative assumptions about the relative proportion of HPV infections in women over the age of 30 attributable to new acquisition of HPV versus reactivation of latent or previously acquired HPV. RESULTS: When we assumed that 50% of HPV infections in older women are attributable to new acquisition of HPV, the overall reduction in cancer varied from 54% with no waning, to 26%, 31%, and 36%, with waning after 5, 10, and 15 years, respectively. As the proportion of persistent HPV infections attributable to new (versus latent) infections was varied from 75% to 25%, the overall reduction in cancer with waning after 5 years ranged from 16% to 36%; at 10 years ranged from 21% to 41%, and at 15 years ranged from 28% to 48%. CONCLUSION: There are dramatic differences in the relative effects of waning when adopting different assumptions about the proportion of persistent HPV infection attributable to new (versus latent) infections in older women, highlighting the high priority that should be placed on empiric data to inform such assumptions.

PCN3

TECHNOLOGY ADVANCES AND TREATMENT PATTERN VARIATIONS IN ONCOLOGY: EVIDENCE FROM USE OF CPT-11 IN ELDERLY METASTATIC COLORECTAL CANCER PATIENTS

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