itabine 14%, vinorelbine 11% or gefitinib 9%). Approximately one-quarter of patients were treated in third line and approximately 10% received fourth line treatment. The vast majority of third and fourth line treatments involved single agents. Toxicities associated with drug therapy were consistent with those that have been previously reported elsewhere. CONCLUSION: In the first line of therapy, patients received care largely reflecting the existing NSCLC evidence base from controlled trial data available during the 2001–2003 period. Treatment patterns and outcomes of patients in community-based practices represent a potential rich source of data to complement controlled trial data. To improve the availability of real-world practice data, further work is necessary to overcome limitations of claims-based oncology data, to enhance the development of analyzable electronic health records, and to establish treatment registries.

**DRUG COST CONSIDERATIONS FOR ERYTHROPOIETIC STIMULATING THERAPIES (ESTs) AGENTS IN PATIENTS INITIATED AT FDA-APPROVED DOSING: RESULTS FROM PRACTICE PATTERNS IN A PROSPECTIVE OBSERVATIONAL STUDY**

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OBJECTIVES: Two ESTs received FDA-approval for fixed initial dosing in cancer patients with chemotherapy-induced anemia: 40,000 units for epoetin alfa (EPO) and 500 mcg for darbepoetin alfa (DARB). Understanding cost considerations, data was analyzed from the Dosing and Outcomes Study of Erythropoiesis-Stimulating Therapies (D.O.S.E.) Registry, an ongoing, prospective registry collecting data on real-world practice patterns. METHODS: Data from 18 U.S. hospital and community-based outpatient practices were assessed from January 2006-December 2006. Chemotherapy-treated adult patients initiated on either EPO 40,000 Units or DARB 500 mcg were evaluated. Outcomes assessed included: mean administered dose, mean treatment duration, dosing patterns, and mean cumulative administered dose. EST cost was based on dose and 9/2006 wholesale acquisition cost (EPO $12.17/1000 Units; DARB $4.446/mcg) with sensitivity analysis based on 4Q06 ASP + 6%.

RESULTS: A total of patients (145 EPO, 23 DARB) were eligible for analysis. Patient groups were similar with regard to baseline age, gender, tumor type, and Karnofsky score. The predominant dosing pattern was QW for EPO and Q3W for DARB. The mean administered dose was EPO 42,879 Units and 497 mcg in DARB group, corresponding to an EST cost of $322 and $2210 per injection. Treatment duration and number of office visits was similar between groups. Mean cumulative administered dose was 305,241 Units for EPO and 1665 mcg for DARB. The corresponding EST costs were $3715 for EPO and $7404 for DARB (p < 0.0001) with similar findings based on sensitivity analysis. CONCLUSION: Practice pattern data from this observational study of cancer patients initiated at FDA-approved fixed dosing reported significantly lower costs in the EPO group compared to the DARB group. Mean cumulative drug cost was $3689 less (50% less) in the EPO group compared to the DARB group. Findings provide further understanding of anemia management costs for health care professionals, hospital systems, and patients.

**ADHERENCE TO GUIDELINES FOR USE OF ERYTHROPOIESIS STIMULATING PROTEINS IN PATIENTS WITH CHEMOTHERAPY-INDUCED ANEMIA: TRENDS FROM ELECTRONIC MEDICAL RECORDS**

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OBJECTIVES: Two national evidence-based guidelines recommend initiation of erythropoiesis stimulating proteins (ESPs) in chemotherapy-induced anemia (CIA) at hemoglobin (Hb) levels of <10 g/dL per ASH/ASCO guideline (2002) and <11 g/dL per NCCN guideline (1998), and maintenance of Hb near but not over 12 g/dL. The extent to which these guidelines are followed in actual practice is unknown. This retrospective study examined the patterns of ESP use in cancer patients with CIA. METHODS: The Varian Medical Oncology database of electronic medical records (EMRs) from 17 outpatient oncology practices in the US was utilized. Adults with a malignant tumor diagnosis between January 1, 2004 and July 27, 2006 who received at least one cycle of chemotherapy were studied. The proportion of patients...