IMPORTANT: Providing oral F was equivalent to providing IV F, in the systematic review of clinical trial and retrospective data for oral and IV fludarabine, the progression-free survival was similar, with 25 mg/m² of IV being equivalent to 40 mg/m² of oral. Oral F has similar efficacy and safety to IV F, and eliminates infusion related adverse events and administration costs. Studies indicated that providing oral F was more convenient for patients and nurses due to the absence of IV administration. No cost or pharmaco-economic data were found. CONCLUSIONS: Oral and IV F were found to have similar clinical efficacy and safety. The oral formulation may potentially lead to substantial economic benefits which may result in possible reductions in infusion related administration and adverse events. Future studies need to compare real-world clinical outcomes and economic impact of oral vs. IV F, taking into account decision-making in clinical practice of both health care providers and patients.

IMPACT OF 5-HT3-RECEPTOR ANTAGONIST STEP THERAPY ON CHEMOTHERAPY INDUCED NAUSEA AND VOMITING ASSOCIATED HOSPITAL AND EMERGENCY ROOM EVENTS

Hattom HT1, Lin SJ2, Buchner D3, Cox D4, Powers A1

1Hind T. Hattom & Company, Chicago, IL, USA, 2University of Illinois at Chicago, College of Pharmacy, Chicago, IL, USA, 3Eli Lilly and Company, Indianapolis, IN, USA, 4Morgan Stanley Children's Hospital, Columbia University Medical Center, New York, NY, USA

OBJECTIVES: To explore the impact of step therapy policies requiring the use of a 1st-generation 5-hydroxytryptamine-3 receptor antagonist (5-HT3-R) treatment before palonosetron (a 2nd generation 5-HT3-R) on the incremental risk of chemotherapy induced nausea and vomiting (CINV) associated with a hospital or emergency room (ER) event. METHODS: Claims data (PharMetrics, Waltham, MA) were used to identify patients with a claim for BC and a claim for DC or PC-containing chemotherapy from 1/1/1998-12/31/05. Subjects were stratified by dosing interval (weekly (qw) or q 21 days (q21)). Neuropathy was defined using ICD-9-CM codes 356.4, 356.8, 356.9, 357.2, 357.4, 357.5, 357.6, 357.8, 357.9, 377.54, both hands, 354.4, 354.5, 354.9, 355.7x, 355.8x and 355.9. Neuropathy grade could not be assessed by claims data. Subjects were followed until the earliest of date of death or last enrollment or 355.7x, 355.8, 355.9. Neuropathy grade could not be assessed by claims data.

RESULTS: The total of 3619 subjects were identified for PC (n = 329; q21; 1685, qw) or DC (n = 204; qw; 1045, qw). A significantly lower frequency of neuropathy was seen in the follow-up period compared to DC-based treatments compared to PC (7.0% vs 10.6%, p = 0.061). The difference was also significant when comparing DC (7.0% vs 10.6%, p = 0.003). Differences were also noted when stratifying by dosing interval (6.7% vs 10.0%; p < 0.001 in qw, 9.3% vs 13.7%; p = 0.061 in qw). After adjusting for covariates, the odds of neuropathy remained lower with DC-based treatments (OR 0.70, CI = 0.53-0.92; p = 0.010). CONCLUSIONS: Less neuropathy was noted with DC-based treatment compared to PC. This difference persisted with stratification by dosing interval. The lower occurrence of neuropathy with DC may favor maintenance of dose intensity.

USING PROPENSITY SCORES TO REDUCE SELECTION BIAS IN AN OBSERVATIONAL STUDY COMPARING RASBURICASE TO ALLOPURINOL IN THE US

Tangriala M1, Seal B2, Douglas D3, Cairns M4

1Smith Hanley Consulting Group LLC, Lake Mary, FL, USA, 2Sanofi-Aventis Pharmaceuticals, Bridgewater, NJ, USA, 3Eli Lily and Company, Indianapolis, IN, USA, 4Morgan Stanley Children's Hospital, Columbia University Medical Center, New York, NY, USA

BACKGROUND: Randomized clinical trials remain the gold standard in evaluating different drug therapies on outcomes but are resource intensive. Retrospective studies using observational data are inexpensive but prone to selection bias due to non-random differences between the intervention and comparator groups. The Propensity Score (PS) method is a novel, multivariate adjustment procedure that reduces confounding and selection bias. METHODS: This case-control study used the Health Facets database (Cerner Corporation, Kansas City, MO), which integrates patient information from hospitals throughout the United States. Cancer patients receiving rasburicase or allopurinol were eligible for study inclusion. Both drugs reduce uric acid (UA) elevation otherwise resulting from tumor lysis syndrome. The PS is the