Two studies involved moderately emetogenic regimens. Palonosetron 0.25mg was associated with a significantly higher complete response (CR) rate in the delayed phase compared to ondansetron (74.1% vs. 55.1%, p = 0.001) and dolasetron (54.0% vs. 38.7%, p = 0.004). The CR rate with palonosetron 0.25mg in the acute phase was significantly higher than ondansetron (81.0% vs. 68.6%, p = 0.009), but only numerically better than dolasetron (63.0% vs. 52.9%, p = 0.049). In the trial with highly emetogenic agents, CR rates were comparable between palonosetron 0.25 mg and ondansetron in both the acute (59.2% vs. 57.0%, p = 0.701) and delayed (45.3% vs. 38.9%, p = 0.180) phases. The FDA considered the CINV claims relative to placebo due to lack of approval of comparators for delayed CINV. Because of its long half-life, NCCN guidelines indicated that single-dose palonosetron could be considered at the start of a multi-day chemotherapy regimen instead of multiple daily doses of other 5-HT3-RAs; however, none of the guidelines designated a preferred 5-HT3-RA. **CONCLUSION:** 5-HT3-RAs can be considered clinically interchangeable. While palonosetron may provide convenience by avoiding the need for repeat daily dosing, this needs to be balanced against its additional cost given the advent of generic 5-HT3-RAs.

PCN3

EFFECTIVENESS OF BORTEZOMIB IN MULTIPLE MYELOMA: PRELIMINARY RESULTS FROM AN INTERNATIONAL ELECTRONIC OBSERVATIONAL STUDY

Delforge M[1], Katodritou E[2], Zervas K[2], Sargin D[3], Hulin C[4], Linderholm M[5], Verrou E[2], Poon V[6], Dhawan R[6]

[1]University Hospital Leuven, Leuven, Belgium, [2]Theagenion Cancer Center, Thessaloniki, Greece, [3]Istanbul University, Istanbul, Turkey, [4]CHU NANCY Brabois, Nancy-Brabois, France, [5]Linköping University Hospital, Linkoping, Sweden, [6]Johnson & Johnson Pharmaceutical Services, Raritan, NJ, USA

OBJECTIVE: Multiple myeloma (MM) is a plasma-cell malignancy with approximately three years median survival. Patients usually relapse or become refractory to existing treatments. Bortezomib(VELCADE) is indicated for the treatment of MM in patients who have received at least one prior therapy. The electronic VELCADE Observational Study (eVOBS) is a multicenter naturalistic study designed to evaluate the clinical and outcomes benefits of bortezomib in actual clinical practice. **METHODS:** This is a multi-center study with sites in Belgium, France, Greece, Russia, Spain, Sweden, and Turkey. The study enrollment period is between October 2006 and December 2008 with a 3-year follow-up. Adults are eligible for study if they are scheduled to initiate bortezomib within the approved indication. All bortezomib dosages and concomitant treatments are permitted, except investigational therapies. Data treatment response, and safety are collected prospectively. **RESULTS:** The current analysis reports data collected on patients initiated with bortezomib between October 2006 and July 2007. A total of 86 pts with at least four months of data are included in this analysis. Demographic and clinical characteristics of the initial participants were similar to those of the participants in the prospective controlled phase 3 APEX trial. Adverse events (AEs) were reported in 61 (71%) pts, including Grade ≥3 AEs in 38% and Grade ≥4 AEs in 9%. AEs were treatment-related in 45% of patients and treatment-limiting in 9%. Presently, 72 of 86 pts have been evaluated for response, of whom 5 (7%) achieved complete response, 9 (13%) achieved near complete response, and 30 (42%) achieved partial response. Updated data will be presented at the meeting. **CONCLUSION:** In this preliminary analysis of data from a prospective, observational study, response rates and safety data demonstrate that bortezomib-containing regimens are effective and well-tolerated in the treatment of MM in actual clinical practice and the results are in line with previously published studies.

PCN4

DATA ANALYSIS WITH GENERALIZED LINEAR MODELS ON LUNG CANCER DATA

Tang G

University of Louisville, Louisville, KY, USA

OBJECTIVES: The Nationwide Inpatient Sample is part of the Healthcare Cost and Utilization Project, and is the only national hospital database with charge information on all patients, regardless of payer, including persons covered by Medicare, Medicaid, private insurance, and the uninsured. It is the purpose of this study to examine the relationship between patient outcomes and conditions of the patients undergoing different treatments for lung cancer. **METHODS:** There are fifteen possible patient diagnoses in the dataset. SAS Enterprise Guide was used to obtain Lung Cancer data from NIS by using the CATX and the RXMATCH statements in SAS. We bring all fifteen diagnoses into one column as a string of codes, using the CATX function. Total charges are used to examine the relationship between diagnoses and procedures. The generalized linear regression model was used to fit the data. **RESULTS:** After filtering down to lung cancer using the strings of diagnoses, there were 5457 records in the data set. By the plot method, we selected variables related to Total charges. We found that the Total charges were highly related to Age in years at admission, Diagnosis Related Group, Length of stay and Died during hospitalization. By the basic criterion, deviance residuals and Pearson chi-square residuals, the specified model fits the data reasonably well. From the Type 1 and Type 3 analysis, all the estimates for the intercept, Los, Age, DRG, and Died were 10.1805, 0.1181, 0.003, –0.0008, and –1.024, respectively. All of them were statistically significant. Co-morbid diagnoses that increased total charges include coronaries, multiple significant traumas, and cardiac implant. **CONCLUSIONS:** Our analysis revealed that there was a specified relationship between these variables. With increasing of length of stay, age in years at admission, small codes of diagnosis related group and surviving during hospitalization, the total charges increase, which is reasonable.

PCN5

META-ANALYSIS ON THE MORBIDITY AND MORTALITY OF CLODRONATE, PAMIDRONATE AND ZOLEDRONATE IN PATIENTS WITH BONE METASTASES

Machado M[1], Cruz LS[2], Araujo GT[3], Fonseca MCM[3]

[1]University of Toronto, Toronto, ON, Canada, [2]Pacific Gateway International College, Toronto, ON, Canada, [3]UNIFESP—Federal University of Sao Paulo, Sao Paulo, Sao Paulo, Brazil

OBJECTIVE: Complications from skeletal-related events (SREs) constitute a challenge to the care of patients with bone metastasis originated from any type of malignancy. Our objective was to determine the reduction in morbidity (SREs) and mortality (overall) of clodronate, pamidronate, and zoledronic acid in patients diagnosed with bone metastasis. **METHODS:** Medline and Embase (from inception to October 2007) were searched in order to retrieve randomized clinical trials evaluating targeted bisphosphonates in cancer patients with bone metastasis. Patients with a definite (i.e., biopsy-proven) diagnosis of metastatic bone disease were included in the analysis. We extracted and combined data from studies describing the number of patients reporting 12-month SREs and mortality data. Two independent reviewers identified articles, then extracted data; results