

groups. The GLM-based estimate of the increase in post-event costs over 30 days among patients with evidence of any adverse events was \$9,807 (95% CI: \$4,386-\$22,947). For all types of adverse events examined, the estimated difference in costs between evented and non-evented patients was positive; the 95% CI did not include zero for all of the adverse events considered except hypertension and proteinuria. **CONCLUSIONS:** Costs associated with AEs of first-line targeted therapies are substantial in patients with mRCC. Efforts to prevent and/or better manage these events may reduce overall healthcare costs.

## PCN42

## HEALTH CARE UTILIZATION AND COSTS AMONG LUNG CANCER PATIENTS IN CHINA

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**OBJECTIVES:** To describe patient characteristics and evaluate inpatient utilization and costs among patients with lung cancer in Tianjin, China. **METHODS:** Retrospective analyses were conducted using Urban Employee Basic Medical Insurance (UEBMI) claims database from Tianjin from 2003 to 2007, which included a 30% random sample of UEBMI enrollees in Tianjin. Patients with >=1 lung cancer diagnosis and continuous eligibility 6 months before and 12 months after the first diagnosis were selected. Inpatient utilization and costs during the 12-month study period were estimated. Costs were valued in 2007 US dollars using the corresponding inflation rate and exchange rate. **RESULTS:** A total of 2351 lung cancer patients were included with mean age of 66.5 years, 34.9% female, and 86.9% retired. Approximately 50.0% patients had metastasis at the first diagnosis. Among them, 46.9% had cardiovascular disease, 27.6% had COPD, and 23.3% had hypertension. The mean number of admissions was 2.44 during the 12 months, with 53.3% of patients having >=1 admission. About 84.8% hospitalizations occurred in a tier-3 hospital. The mean length of stay was 25.9 and 24.2 days, respectively, for first and subsequent admissions. Anti-neoplastic agents were used in 66.1% hospitalizations. The mean cost per hospitalization was \$2473 and \$ 2260 for first and subsequent admissions, respectively. The total 12-month inpatient costs were \$ 5511 per patient: 70.9% were covered by payers and the rest by patients. Approximately 58.2% of the total inpatient costs were attributed to medication costs. Examinations, medical consumables and bed accounted for 13.4%, 6.3% and 5.0% of the total inpatient costs, respectively. **CONCLUSIONS:** The majority of lung cancer patients is metastatic and treated in tier-3 hospitals. Lung cancer poses substantial economic burden to payers and patients. The majority of the costs were attributed to medications.

## PCN43

## ECONOMIC BURDEN OF HEPATOCELLULAR CARCINOMA IN CHINA

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**OBJECTIVES:** China has over 50% of new hepatocellular carcinoma (HCC) cases in the world. The study estimated the economic burden associated with HCC in Tianjin, China. **METHODS:** Data were obtained from the Tianjin Urban Employee Basic Medical Insurance (UEBMI) database (2003-2007), including inpatient claims for medical services and prescription drugs for 30% enrollees. Adult patients with >=1 diagnosis of HCC and 6-month continuous enrollment before and after the first HCC diagnosis between 2003 and 2007 were selected. Patient characteristics, healthcare utilization and costs were analyzed. Costs were estimated in 2007 U.S. dollars using the Medical Service Consumer Price Index (CPI) in China and an exchange rate of 7.598 Chinese Yuan to 1 USD in 2007. **RESULTS:** A total of 857 HCC eligible patients were included in the analysis with a mean age of 62.2 years, 25.0% female and 72.4% retired. Approximately 65.2% of all patients had >=1 comorbidity, 48.4% had cirrhosis, 35.4% had HBV/HCV, 18.1% had esophageal varices, 10.2% had encephalopathy, and 14.4% had diabetes mellitus. The mean number of hospitalizations during the 6-month study period was 1.62, with 40.0% patients having >1 hospital admissions. About 84.0% hospitalizations occurred in tier-3 hospitals. The mean length of stay (LOS) was 24.6 days per hospitalization and 38.9 days during the 6-month study period. The total 6-month inpatient costs were \$4,400 per patient with 70.1% covered by UEBMI and 29.9% by patients. Medication costs accounted for 56.3% of total inpatient costs; the rest was attributed to medical services. Examinations, medical consumables and bed costs accounted for 14.3%, 9.3% and 4.9% of total inpatient costs, respectively. **CONCLUSIONS:** The majority of Chinese HCC patients receive treatment in tier-3 hospitals. HCC poses substantial economic burden to the payer and patients in China. Medications accounts for more than half of the total inpatient costs.

## PCN44

## EXAMINING THE COST OF CHEMOTHERAPY INDUCED NAUSEA AND VOMITING IN PATIENTS TREATED FOR CANCER IN A MEDICAID POPULATION

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**OBJECTIVES:** Chemotherapy-induced nausea and vomiting (CINV) is a major adverse effect of cancer treatment. The 5-hydroxytryptamine<sup>3</sup> receptor antagonists (5-HT<sub>3</sub>-RA), a class of antiemetic medications, are indicated for the prevention of CINV. This study compared treatment costs of patients with and without CINV following a highly or moderately emetogenic chemotherapy regimen and anti-

emetic prevention with a 5-HT<sub>3</sub>-RA. **METHODS:** This study was a retrospective cohort analysis using the MarketScan<sup>®</sup> Medicaid database. Continuously enrolled adult patients, newly diagnosed with cancer, newly treated with a MEC or HEC regimen, who received a prophylactic 5-HT<sub>3</sub>-RA during the January 1, 2005 to December 31, 2009, were identified. The primary outcome of interest was the overall cost of care for patients with and without CINV. CINV was defined by any claim for nausea and vomiting, fluid depletion or replacement, and the use of a rescue antiemetic during a cycle of chemotherapy. **RESULTS:** A total of 8812 patients were identified, 33% undergoing HEC and 67% treated with a MEC regimen. The mean age was 56.7 and 65% were female. Patients were treated with a total of 43,418 cycles of chemotherapy. The overall rate of CINV was 17% per cycle and the rate differed by prophylactic 5-HT<sub>3</sub>-RA utilized. The rate of CINV per cycle for patients treated with palonosetron was 13% compared to 20% for those treated with another 5-HT<sub>3</sub>-RA. The average total paid health care cost per cycle was \$2827. Average cost per cycle with and without CINV was \$3839 and \$2695, respectively, p<0.001. **CONCLUSIONS:** In this retrospective study, health care costs associated with the prevention of CINV were approximately \$1144 per cycle of chemotherapy. This suggests that a reduction in the rate of CINV for patients undergoing chemotherapy could result in significant health care cost savings in the Medicaid system. Further studies are warranted to confirm these findings.

## PCN45

## EPIDEMIOLOGY, TREATMENT PATTERNS AND COSTS IN PATIENTS WITH STAGE III/IV MELANOMA

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**OBJECTIVES:** Melanoma is the most serious type of skin cancer that starts in melanocytes. New treatment methods may offer significant benefits in treating patients with advanced melanoma, but in order to assess their cost-effectiveness via pharmacoeconomic modelling data on epidemiology, current standard of care, adverse events and costs is needed. The aim of this study is to collect such information using surveys in major centers in Poland. **METHODS:** A questionnaire was designed and implemented in MS Excel, and then distributed in three hospitals in Poland covering the majority of melanoma patients being treated. The survey questions encompassed: the disease characteristics, current treatment patterns, health care resources utilization and costs among patients diagnosed with melanoma (SIII-SIV). Resources costs and standard of care data for melanoma patients were divided into three therapy lines, and information such as treatment scheme, drug cost and performed diagnostic procedures were collected. **RESULTS:** The preliminary results coming from one center are available at this stage. Melanoma incidence and mortality rate (per 100,000) are equal respectively to 8.8 and 3.7 (data for year 2010). The continuation of existing trends will cause an increase of morbidity in the next years and the number of incidence cases can even double in 10 years time. The most common form of treatment in metastatic patients is chemotherapy. The results demonstrate that costs of consecutive lines of therapy decrease, and total yearly cost of 1st, 2nd and 3rd line treatment is estimated to be 1.2mln PLN (1 Euro=4.4 PLN). Adverse events total cost amounts to 77,000 PLN. **CONCLUSIONS:** Melanoma is one of the most malignant human cancers in Poland with an increasing incidence rate. In connection with several treatment patterns that exist, it is necessary to gather detailed clinical data in order to use it in pharmacoeconomic modelling in health technology assessment process.

## PCN46

## A DESCRIPTIVE ANALYSIS OF OVARIAN CANCER IN VETERAN PATIENTS IN THE UNITED STATES

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**OBJECTIVES:** To assess the clinical and economic burden of ovarian cancer in the US veteran population. **METHODS:** A retrospective study (October 01, 2005 to September 30, 2010) was conducted using the Veterans Health Affairs Medical SAS Datasets. Patients diagnosed with ovarian cancer were included in the study. Health care resource utilization and costs were assessed for ovarian cancer patients in the 12-month follow-up period. Patients' demographic, clinical and discharge statuses were compared using Chi-square testing and standardized differences. Student t-tests were used for the means of continuous variables. Mortality and survival rates were also calculated using the Kaplan and Meier method and the PROC LIFETEST procedure. **RESULTS:** Among the selected ovarian cancer patients (n=1,148), the total mortality rate in the 12-month follow-up period was 20.84% (n=239). The most commonly prescribed medications were sodium chloride (3.14%), dextrose (1.83%), potassium chloride (1.58%), and warfarin (1.02%). The average number of inpatient (0.46), emergency room (ER) (0.41), physician office (30.31) and outpatient visits (30.74) were calculated per patient. The percentage of inpatient, ER, physician office and outpatient were 27.35%, 21.43%, 100% and 100%, respectively. The cost of inpatient, ER, physician office and outpatient visits were \$6610, \$138, \$9702, and \$9959, respectively. **CONCLUSIONS:** More research is required to better understand adverse events and side effects of ovarian cancer treatments. This study suggests that sodium chloride and dextrose were the most frequently prescribed drugs after diagnosis of ovarian cancer.