years, 51% female, 97% commercially-insured). Unadjusted 1-year post-failure costs increased by LOT for total health care (1L:$78,667, 2L:$99,624, 3L:$181,029) and medical services (i.e., non-pharmacy) (1L:$35,578, 2L:$51,078, 3L:$146,768), as did medical costs as a proportion of total costs (1L:45%, 2L:51%, 3L:81%). In adjusted analyses, compared to 1L, 2L failures had: 45% more ambulatory visits (mean 31 vs. 21, 95% CI on RR 1.26-1.66), 75% higher risk of hospitalization (33% vs. 23% hospitalized, 95% CI 1.16-2.64), 38% higher total costs (95% CI 1.14-1.68), and 73% higher medical costs (95% CI 1.31-2.29). Medical costs comprised a greater proportion of total costs in 2L vs. 1L (55% vs. 44%); pharmacy costs did not increase significantly. **CONCLUSIONS:** The burden of TKI treatment failure increases by LOT, due to increased MRU and associated costs. More efficacious treatment used in early therapy lines may reduce downstream costs by preventing treatment failure.

PCN64
COST OF BREAST CANCER IN VIETNAM
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OBJECTIVES: In recent years, breast cancer remains the leading cause of death in women worldwide. Evaluating the economic burden of breast cancer is very important due to long-term treatment with expensive drugs and medical services. In Vietnam related studies has not been conducted until now. This is also the aim of this study. **METHODS:** The cost of breast cancer has been evaluated using pharma-coeconomic method "cost of illness" by following formula: COI = DC + IC in which: COI - cost of illness, DC- direct cost, IC- indirect cost A tree-decision model has been developed to evaluate the cost of different stages of breast cancer. This analysis was conducted based on the perspective of health insurance companies, therefore only direct medical costs were evaluated. The price of drugs and medical services have been averaged from the price-list of some major hospitals in Vietnam. The cost of disease for the whole society of Vietnam has been evaluated based on epidemiological data in Vietnam in 2013. **RESULTS:** The average cost of treatment per year of breast cancer in stage 0- I, II, III, IV accounts for 33,166,886; 287,057,068; 325,116,474 and 153,352,776 VND, respectively. In the structure of average cost with the increasing in severity of disease, the percentage of drug costs increase (from 28.7% in stage 0-I to 95.1% in stage 4) and the percentage of medical services decrease (from 71.3% in stage 0-I to 4.9% in stage 4). The cost of breast cancer for the whole society of Vietnam resulted in around 6,633 billion VND. **CONCLUSIONS:** The cost of breast cancer increases following the severity level of disease with the increasing percentage of drugs costs and reducing percentage medical services costs. The high cost of breast cancer for the whole society of Vietnam needs to be concerned to conduct the relevant health care policies.

PCN65
EVALUATE THE ECONOMIC BURDEN OF NON SMALL CELL LUNG CANCER IN VIETNAM
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OBJECTIVES: Evaluate the economic burden of non-small cell lung cancer (NSCLC) in Vietnam. **METHODS:** Economic burden analysis has been conducted, following which the economic burden of NSCLC for the whole society of Vietnam has been evaluated by following formulas: $C = \sum P_i \times COI_i$ in which, C: economic burden of NSCLC in Vietnam; P_i: number of patients in stage i of NSCLC in Vietnam, COI_i: cost of NSCLC in stage i The analysis has been conducted based on the perspective of health insurance companies, therefore only medical direct cost has been evaluated. The cost of drugs and medical services has been averaged from the relevant drugs and medical services of some major hospitals in Vietnam. The number of patients in every stage of NSCLC has been retrieved from epidemiological database of Vietnam in 2010. The model has been developed to evaluate the economic burden of NSCLC and also further adapt the changes of price and epidemiological data over years. **RESULTS:** The economic burden of NSCLC for the whole society of Vietnam is over 3,517 billion VND. In the structure of economic burden of NSCLC, the economic burden for drugs consists of 73.9% (2,600 billion VND), which is around 3 times higher than economic burden for medical services (900 billion VND). Comparing the economic burden of NSCLC by stages, it has been found that the economic burden of NSCLC increases with the increasing in the severity of disease. However stage III with the less severity than stage IV has the highest economic burden with the amount of 2,490 billion VND due to the high cost of treatment and high number of patients. **CONCLUSIONS:** The high economic burden of NCSLC should be considered to conduct the relevant health care policies, especially with high-cost drugs and patients in late stages of disease.

PCN67
ECONOMIC BURDEN AND HEALTH CARE UTILIZATIONS OF UNITED STATES MEDICARE PATIENTS DIAGNOSED WITH PROSTATE CANCER
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OBJECTIVES: To examine the economic burden and health care utilizations of U.S. Medicare patients diagnosed with prostate cancer (PC). **METHODS:** A retrospective analysis was conducted using national Medicare claims data (01JAN2008-31DEC2010). Medicare beneficiaries diagnosed with PC were identified using International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) diagnosis code 185.xx, and the initial diagnosis date designated as the index date. Eligible patients were required to have 1 year continuous enrollment pre- and post-index date. Charlson Comorbidity Index (CCI) score and baseline comorbid conditions were examined for the baseline period. Prescribed medications were captured within 60 days post-index date. Health care utilization and costs were measured for the follow-up period, and costs were adjusted to 2010 U.S. dollars. **RESULTS:** A total of 21,616 PC patients were identified, of which 99.2% were male and 84.4% Caucasian. PC patients enrolled in Medicare had a mean age at 76.1 years and more often resided in the Southern U.S. region (37.7%). The baseline CCI score was 1.76,

and common comorbid conditions included diabetes (27.3%), tumor (23.6%) and moderate or severe renal disease (21.2%). Simvastatin (7.3%), lisinopril (5.9%) and hydrocodone bitartrate/acetaminophen (5.1%) were the most frequently prescribed medications. During the follow-up period, PC patients had evidence of the following health care utilizations: Medicare carrier (98.0%), Durable Medical Equipment (DME, 32.1%), Home Health Agency (HHA, 12.1%), outpatient visits (75.9%) and inpatient hospital (29.5%), Skilled Nursing Facility (SNF, 7.2%) and hospice admissions (5.4%) and prescription drug (part D event) claims (43.7%). PC patients incurred higher Medicare carrier ($6,330), DME ($328), HHA ($647), outpatient ($19,041), inpatient ($5,814), SNF ($1,229), hospice ($475), pharmacy ($1,144) and total costs ($35,008). **CONCLUSIONS:** Patients who were enrolled in Medicare and diagnosed with PC had high utilization of Carrier and outpatient services, as well as frequent comorbid conditions, resulting in considerable health care expenditures.

PCN68
ECONOMIC COST OF ADVERSE EVENTS PER COURSE OF THERAPY WITH COMMONLY USED FIRST-LINE REGIMENS FOR THE TREATMENT OF CHRONIC LYMPHOCYTIC LEUKEMIA
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OBJECTIVES: In previous studies in chronic lymphocytic leukemia (CLL), adverse events (AEs) associated with commonly used therapies have primarily consisted of infusion reaction, myelotoxicity, and infection. This study estimated the cost of specific AEs per course of therapy associated with commonly used first-line treatment regimens for CLL in the United States. **METHODS:** This retrospective claims data analysis used Truven Health Analytics MarketScan® commercial and supplemental Medicare databases from January 2005 through August 2012. Eligible patients were ≥18 years, had a diagnosis of CLL, and continuous enrollment for ≥6 months prior to diagnosis. All patients received ≥1 dose of one of the following 5 regimens: fludarabine, cyclophosphamide, and rituximab (FCR); bendamustine plus rituximab (BR); chlorambucil, fludarabine plus rituximab (FR); or rituximab. AEs were identified from ICD-9-CM codes that either explicitly described the event of interest or that described interventions that were specific to the AE. Costs related to each AE were summed from diagnosis to the end of initial therapy. Drug costs of CLL therapies were excluded. Adjusted costs were estimated using a propensity-weighted generalized linear model (GLM), which controlled for differences in baseline characteristics across treatment groups. **RESULTS:** Of 2,035 patients, 497 received FCR, 130 received BR, 449 received chlorambucil, 297 received FR, and 662 received rituximab. Mean age was 69.5 years (SD: 12.4) and 64% were male. Comorbidities included diabetes (19%), COPD (16%), and cardiovascular (14%) disease. AE results (frequency; adjusted cost; and 95% CI, respectively) were as follows: infusion reaction (40%; $4482; $4141-$4862), anemia (35%; $8894; $8267-$9586), infection (26%; $7163; $6648-$7733), dyspnea (9%; $859; $751-$989), neutropenia (8%; $5406; $4629-$6367), febrile neutropenia (5%; $17,274; $14,374-$21,010), thrombocytopenia (2%; $12,621; $8933-$18,651), and leukopenia (1%; $1720; $1218-$2539). **CONCLUSIONS:** Infusion reaction, myelotoxicity, and infection have substantial economic costs in CLL, which may be reduced by improved patient management.

PCN69
HEALTH CARE RESOURCE UTILIZATION IN THE MANAGEMENT OF CHRONIC LYMPHOCYTIC LEUKEMIA AT AN ONTARIO CANCER CENTRE
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OBJECTIVES: To collect health care resource utilization (HCRU) in the management of chronic lymphocytic leukemia (CLL) patients who have relapsed/refractory disease, and had at least one previous chemotherapy treatment. **METHODS:** A retrospective, longitudinal, cohort study design is being used involving three cancer centres in Ontario, Canada. A convenience sample of 90 CLL patients was selected with inclusion criteria of adult age at diagnosis, date of diagnosis between January 1, 2006 to 2012, relapsed/refractory disease that required at least one previous therapy, and minimum of one oncology visit. Demographics and HCRU data were collected with descriptive statistics to be presented. Costs are in 2013 Canadian dollars. **RESULTS:** At the Juravinski Cancer Centre (Hamilton, Ontario), 30 CLL patients met the study inclusion criteria. 22 were male with the mean age at diagnosis being 65.2 years (range 41-86 years). 43% (13/30) of the interim cohort had genetic testing. 73.3% of patients (22/30) received fludarabine-based chemotherapy as first-line treatment. 13.6% (3/22) were re-treated with fludarabine as second-line treatment. 26.7% of patients (8/30) received chlorambucil as first-line treatment. Of those, 2 patients were re-treated with chlorambucil as second-line treatment, 4 received fludarabine-based chemotherapy, and 2 did not receive further treatment. 40% of patients (12/30) were given rituximab. 90% of patients who needed other medications utilized a mean number of 6.0 (0-15) drugs. Half of the cohort visited the emergency department a total of 19 times and experienced 25 adverse events. The total cost of diagnostic tests/procedures was $17,502, $28,895 for hospitalizations, and $49,794 for specialist visits. **CONCLUSIONS:** Preliminary results from one cancer centre indicate substantial HCRU associated with CLL management. The authors plan to complete data extraction at the two remaining cancer centres in order to determine HCRU and cost results for the full cohort.

PCN70
COST & RESOURCE UTILIZATION OF CERVICAL CANCER IN BRITISH COLUMBIA
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