

surgery at any time during the study period was present in 94.5%, 91.2%, and 65.9% of patients, respectively (5.5% of patients had no claims indicating any prior cancer treatment). Mean length of chemotherapy treatment was 806 days, and 571 days for biologic treatment. **CONCLUSIONS:** Patients initiated on regorafenib were largely suffering from metastatic cancer, and had a range of comorbid conditions. Nearly all patients were treated with chemotherapy and/or biologic agents before initiating regorafenib treatment.

## PCN178

## USE OF BONE-MODIFYING AGENTS FOLLOWING ANDROGEN DEPRIVATION THERAPY FOR MEDICARE NON-METASTATIC PROSTATE CANCER PATIENTS

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**OBJECTIVES:** Guidelines on the management of cancer treatment-induced bone loss (CTIBL) in men receiving androgen deprivation therapy (ADT) for prostate cancer (PC) recommend bisphosphonate (BP) therapy or other bone-modifying agents (BMAs). There is limited information on the use of BMAs for CTIBL in men with PC. We examined BMA utilization patterns following ADT initiation among elderly men with non-metastatic PC. **METHODS:** Using linked Surveillance, Epidemiology, and End Results (SEER) & Medicare data, we identified men aged 66+ with incident non-metastatic PC diagnosed during 2007-2009, with claims from 2006-2010. Patients received ADT within 6 months after diagnosis and had at least 6 months of Part D enrollment during follow-up. Multivariable logistic regression model was estimated to identify demographic and clinical factors associated with BMA utilization following ADT initiation. **RESULTS:** We identified 7,545 non-metastatic PC patients who received ADT (median age: 74). The sample included patients with stage 2 (80%), 3 or 4 (8%), or unstaged (12%) PC. Overall, 8.6% had any BMA use after ADT initiation and the most common BMAs were oral BP (5.2%), intravenous BP (3.3%), followed by calcitonin (0.5%). A small proportion (1.6%) of the sample had any BMA use prior to ADT initiation. The median time to first BMA use after ADT initiation was 189 days. Factors associated with statistically significant increased likelihood of BMA use were older age, poorly differentiated tumor, and presence of osteoporosis. Compared to stage 2 PC patients, those with stages 3 or 4, and unstaged PC were more likely to receive BMA ( $p < 0.01$ ). Patient race/ethnicity, comorbidity profile, and history of fracture were not statistically significantly associated with BMA receipt. **CONCLUSIONS:** Less than 10% of elderly men diagnosed with non-metastatic PC and initiating ADT received any BMA, suggesting that a significant gap remains in the prevention and treatment of CTIBL in this population.

## PCN179

## THE DOWNWARD TREND IN ONCOLOGY DRUG PRICING, SPEED TO MARKET AND ACCESS

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**OBJECTIVES:** Quantify the price, time and volume concessions incurred by manufacturers launching new oncology drug treatments across the EU5 in order to gain market access. **METHODS:** We analyzed launches of innovative oncology products in both the US and EU5 since 2005 ( $n=23$ ). Two cohorts (2005-08; 2009-2013) were defined where we analyzed price, volume and access time. We created an overall opportunity index combining these 3 variables. Prices (MSP - Midas) were made relative to the US price. Time to access: 2 points were measured - time from regulatory approval to price approval by authorities where applicable and time to first reported sales. Volume was assessed as units sold over the period cohort, normalized by the local epidemiology. **RESULTS:** Price, time to access and volume are all worsening for all EU markets compared to the US. The overall combined opportunity index has declined or remained low and flat in France (1.22 - 0.93), Germany (0.80 - 0.75), Italy (0.45 - 0.46), Spain (0.67 - 0.39) and UK (0.54 - 0.57). US = 1. **CONCLUSIONS:** Ongoing EU health care budget management have been modifying the relative commercial attractiveness compared to the US of many products including new oncology compounds in Europe. The EU empirical mindset of trading off price to gain faster access to market with no or minimal concession on the usage is not supported by the data. For a health care perspective, the under usage of oncology products potentially and directly impacting overall survival of the patient compared to the US may potentially lead to a lower survival in EU compared to the US. Epidemiologists may only able to detect this consequence in the coming years.

## PCN180

## FACTORS ASSOCIATED WITH REPEAT MAMMOGRAPHY SCREENING IN THE MEDICAID POPULATION

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**OBJECTIVES:** Limited information currently exists regarding use of routine mammography screening among Medicaid enrollees. The current study determined the prevalence of repeat mammography screening and the associated factors in the Medicaid population. **METHODS:** The 2006-2008 Medicaid Analytic Extract (MAX) data for 39 states in the United States were used in this study. The target population consisted of female recipients aged 40-64 years who were continuously enrolled in the Medicaid program during 2006-2008. Recipients with a diagnosis of breast cancer were excluded from the study. Repeat mammography screening was defined as receipt of two successive mammograms during the study period with a gap of 10-14 months. The effect of various recipient- and county-level factors on repeat mammography screening was determined using hierarchical logistic regression. **RESULTS:** Approximately 1.19% of the recipients received repeat mammograms during the study period. The repeat mammography screening rates were higher in older women and those belonging to ethnic minorities than younger women and whites. Number of visits to physician offices and outpatient centers, hormone replacement therapy, and routine cervical cancer screening were positively associated with repeat mammography screening. However, number of emergency

room visits was negatively associated with repeat mammography screening. No association was observed between county level characteristics such as number of primary care physicians, number of mammography screening facilities, and number of federally qualified health care centers per 10,000 women and repeat mammography screening. **CONCLUSIONS:** Mammography screening is underutilized in the Medicaid population. Various factors predicting repeat mammography screening were identified. Program planners should consider these factors when designing educational interventions aimed at increasing routine use of mammography screening among Medicaid enrollees.

## PCN181

## ONCOLOGY PRICING TRENDS IN THE UNITED STATES AND THE UNITED KINGDOM (2011-2013)

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**OBJECTIVES:** To understand relative price differential for cancer drugs in the U.S. and the U.K. Develop implications for pricing strategy and patient access for cancer drugs. **METHODS:** Ten branded cancer drugs were selected and their prices for similar dose and packaging were compared in the U.S. and the U.K. Prices were analyzed for the end of 2011 and 2012. Historical exchange rates were used to convert British pounds to US dollars. Relative price discount was calculated for all selected cancer drugs. KOLs and payers were interviewed to understand current and future implications of this price differential. **RESULTS:** The median price discount for selected ten branded cancer drugs in the UK versus the United States was ~50%. The range of discount for 10 branded cancer drugs was 27%-61%. The price discount for oral small molecule drugs was higher than for biologics (55% vs. 45%). Since the U.K. is one of the few remaining free pricing markets in Europe, other European markets are likely to have even higher discounts relative to the prices in the U.S. Due to rising coinsurance of specialty products, U.S. cancer patients bear significantly higher costs than patients in the UK. KOL and payer interviews suggest U.S. pricing trends for cancer drugs are unlikely to be sustained at this level in the future. **CONCLUSIONS:** U.S. cancer drug prices are significantly higher than the prices in the U.K. This price differential is unlikely to be sustained in the future.

## PCN182

## AN APPRAISAL OF PCODR'S DECISIONS AND INFLUENCE OVER THE LAST 3 YEARS

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**OBJECTIVES:** The purpose of this study was to understand pCODR's impact on provincial formulary decisions since its establishment in 2010. **METHODS:** 29 pCODR reviews were analysed. The agency publishes its reviews on its website, [www.pcodr.ca](http://www.pcodr.ca), including final recommendations for provinces to consider in their respective formularies. pCODR also publishes a "Provincial Funding Summary" of 9 provinces (all except Québec) following each of its final recommendations when available. pCODR's recommendations were indexed with corresponding provincial decisions in order to measure the frequency with and degree to which provinces follow pCODR guidance. **RESULTS:** Out of the 29 final recommendations analysed, pCODR has issued 24 positive funding recommendations, including 20 "conditional on cost-effectiveness being improved." Given the 24 positive recommendations, provinces funded products with similar or more restrictiveness than pCODR's recommendation 21.3% of the time and with less restrictiveness 6.9% of the time; provinces remained under consideration, negotiation, or lacked any status update 71.8% of the time. No province has rejected funding of an oncology product following a positive pCODR recommendation. pCODR issued negative funding recommendations 5 of 29 times. Of these, provinces have almost never funded the product in turn. **CONCLUSIONS:** Provinces have tended to follow pCODR's recommendations or not make a decision. Compared to other provinces, Alberta tends to fund products with fewer restrictions than pCODR recommends, while Ontario demonstrates more restrictiveness. Saskatchewan has followed pCODR most closely. Manitoba, New Brunswick, Newfoundland and Labrador, and Prince Edward Island respond most slowly, in "consideration" or "negotiation" of most pCODR recommendations.

## PCN183

## EFFECTS OF THE PRIMARY PAYER TYPE AND RACE/ETHNICITY ON PROSTATE CANCER SCREENING PRACTICES DURING PREVENTIVE HEALTH EXAMS IN UNITED STATES AMBULATORY CARE SETTINGS

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**OBJECTIVES:** There is limited information on the relationship between insurance coverage and prostate cancer (PCa)-screening practices among race/ethnic minorities in ambulatory care settings in the US. The objective of this study was to determine whether the observed race/ethnicity differences in prostate-specific antigen (PSA)-screening for PCa may be explained by differences in insurance coverage. **METHODS:** We analyzed a nationally representative sample of visits to office-based physicians' practices from 2005-2010 using the National Ambulatory Medical Care Survey (NAMCS). The sample consisted of outpatient visits for preventive health exams (PHEs) of men aged 40 years and above, without PCa. The primary insurance payer categories were mutually exclusive and included the following: Medicare, Medicaid, private insurance and other types. Information on the receipt of PSA-screening, demographics, physician specialty and type of office setting were collected. Generalized estimating equations were used to investigate the effect of race and insurance type on PSA-screening. **RESULTS:** Application of the inclusion criteria resulted in 5,829 office-visits for PHEs. Majority (57%) of the sample was aged below 66 years, 10% were African Americans and 9% Hispanics. Over 47% were covered by private insurance, 39% by Medicare and 5% Medicaid. Overall, 16% received PSA-screening during a PHE. Hispanics (prevalence ratio:0.62, 95%CI:0.43-0.90) and Medicaid (prevalence ratio:0.24, 95%CI:0.11-0.55) patients were less likely to receive PSA-screening compared to Whites and patients with private insurance. PHEs