

by crizotinib. **CONCLUSIONS:** In this NMA of treatments for patients with previously treated advanced/metastatic NSCLC, ceritinib was associated with significantly reduced risks of death or progression, by 40-85%, and with higher ORR, compared with other active treatments. Comparisons of non-randomized treatment groups are limited by the potential for confounding due to unadjusted cross-study differences.

#### PCN42 SURVIVAL AND COST AMONG PHOTODYNAMIC THERAPY PATIENTS WITH NON-SMALL CELL LUNG CANCER

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**OBJECTIVES:** In USA, there are 221,200 estimated new cases of lung cancer and 158,040 deaths due to lung cancer in 2015. Lung cancer accounts for about 27% of all cancer deaths and is the leading cause of cancer death. Non-small cell lung cancer (NSCLC) constitutes about 85-90% of all lung cancer cases. Objective of this study was to assess the incremental value of survival and cost of care in NSCLC patients treated with photodynamic therapy (PDT), compared to radiation and ablation therapy. **METHODS:** Retrospective analysis using SEER-Medicare linked data. Patients with NSCLC diagnosed between 2000 and 2007 (n=221195) were identified and retrospectively followed for one-year pre and three-year post diagnosis. We analyzed survival length and cost over the follow-up period for three groups: PDT with radiation, ablation with radiation and radiation alone. Variation in health service use and cost was analyzed across phases of care. We used Cox proportional hazard model to assess mortality (all-cause and lung cancer-specific); we employed generalized linear models to study total costs in follow-up period. **RESULTS:** Of the NSCLC cohort, 51382 had radiation therapy alone, 78 received PDT with radiation, and 208 received ablation with radiation. Mean survival (in days) was highest for PDT with radiation patients (mean 537, std 491), followed by radiation alone group (mean 452, std 595), and lowest for ablation with radiation group (mean 349, std 465). Total cost over follow-up period was highest for ablation with radiation group, compared to the radiation alone group, after controlling for demographic and clinical covariates (beta estimate=0.5536, SE=0.0847, p<.0001). **CONCLUSIONS:** Among NSCLC patients, addition of PDT improved survival. Total cost was higher for those receiving ablation with radiation, compared to those receiving radiation alone. Future research should address the comparative effectiveness to understand the ultimate clinical implications of PDT therapy for NSCLC patients.

#### PCN43 EFFECTS OF NUTRITIONAL SUPPLEMENT USAGE ON MORTALITY IN COLORECTAL CANCER PATIENT WITH ABDOMINAL RESECTION SURGERY

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**OBJECTIVES:** Effects of malnutrition in patients with colorectal cancer (CRC) are often disregarded. This abstract aims to report nutritional supplement (NS) usage in CRC patient with abdominal resection surgery (ARS) in Turkey using general health insurance (GHI) reimbursement database of Social Security Institute (SSI). **METHODS:** Turkish GHI system has covered 98% of total population of Turkey. Therefore statistics obtained via the GHI database are highly representative of the population of Turkey. From GHI database, patient with CRC (by using ICD-10 code) who underwent any kind of ARS (by using relevant codes in national medical procedures code book) between 1Jan2009 and 31Dec2013 were included to analysis. **RESULTS:** Of 42,970 CRC patients with ARS in database, 27,471 patients (mean age: 61.5 years, 42.7% female and 2.0% used pre-operative chemotherapy) met selection criteria of this abstract. NS was used 6.3% of the patients during hospitalization (median 12.0 days) and NS was used median 2.0 days during hospitalization. Mortality rate was 4.6% during hospitalization. Of the 26,203 discharged patients, 1.7% used NS during outpatient follow-up duration and 1.3% used NS more than 30 days based on prescribing data. Moreover, 97.3% of patients who received NS during hospitalization did not continue NS usage during outpatient follow-up duration. Median survival durations were 60.0 and 47.7 months in patients not used NS and used NS, and 12-month survival rates were 80.0% and 68.0%, respectively. **CONCLUSIONS:** The abstract showed NS usage patterns in CRC patients with ARS in Turkey. Although malnutrition risk in CRC patients has been reported to be high, NS usage ratio is low and usage duration is relatively short. Moreover survival analyses revealed that NS seems to be given to patients with advanced stage of CRC. In conclusion strategies to increase usage of malnutrition diagnosis and treatment algorithm should be developed.

#### PCN44 A CROSS-SECTIONAL EPIDEMIOLOGICAL CANCER REGISTRY IN EGYPT

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**OBJECTIVES:** This cross-sectional study (CSS) aims to calculate the incidence rates of all cancer types in Egypt as well as typography breakdown of each cancer type. **METHODS:** Data of 40,477 patients were collected from Tanta Cancer Center retrospectively to form the largest population-based cancer registry in Egypt covering a period of 9 years. The cancer incidence rates are calculated based on population of Gharbiah (as an indicator for rates in Egypt) and based on number of cases of each cancer type there. **RESULTS:** Breast cancer is considered to be the major cancer type with 18% (99% CI= 16.6%-19.4%) (n= 7332) share of total cancer cases, followed by liver cancer: 10.5% (99% CI= 8.6%-12.4%) (n= 4265). Bladder cancer's share is: 8.7% (99% CI= 6.6%-10.8%) (n= 3521) followed by lymph node, lung, and blood cancers: 8.1% (99% CI= 5.9%-10.3%) (n= 3270), 6.2% (99% CI= 3.7%-8.7%) (n= 2512) and 6.05% (99% CI= 3.55%-8.55%) (n= 2449) respectively. The age standardized incidence rates are highest for breast cancer (33.8), liver cancer (25.5) and bladder Cancer (16.5). Worldwide, Egypt is considered to have higher rates for liver and bladder cancers than other countries all over the world. Projections for cancer incidence rates in the future can be drawn as well in the registry till the year 2025. **CONCLUSIONS:** In the lack of any accurate data in the time being, this CSS registry provides a well-designed guide for decision makers about the actual weight for each cancer type in Egypt Also this

patient registry is the first step towards generating outcome data in terms of costs and effectiveness in later stage.

#### PCN45 IMPACT OF CANCER DIAGNOSIS AND TREATMENT ON GLYCAEMIC CONTROL AMONG INDIVIDUALS WITH COLORECTAL CANCER USING GLUCOSE LOWERING DRUGS

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**OBJECTIVES:** This study aims to evaluate the impact of cancer and its treatment on HbA1c-values among individuals with colorectal cancer (CRC) using glucose lowering drugs (GLDs). **METHODS:** Patients with primary CRC (1998-2011) were selected from the Eindhoven Cancer Registry and linked to the PHARMO Database Network including out-patient pharmacy and clinical laboratory data. Patients with more than two years of GLDs use prior to cancer diagnosis were included. Linear mixed effects models were conducted to evaluate changes in HbA1c for colon cancer (CC) and rectal cancer (RC) patients in the four years around CRC diagnosis. **RESULTS:** Of all CRC patients (n=4,714), 294 (6%) GLDs users with CC and 144 (3%) with RC were selected. In the crude model, mean HbA1c at cancer diagnosis was 6.9% (51.6 mmol/mol) among CC patients and 7.1% (53.5 mmol/mol) among RC patients. Among CC patients, HbA1c decreased with 0.12% per year (p=0.0002) before cancer diagnosis in the adjusted model and after diagnosis it increased with 0.12% per year (p=0.02). In subgroup analyses, effects on HbA1c were more pronounced in users of anti-anaemic preparations, these preparations are suggested to interfere with HbA1c. Among RC patients, HbA1c decreased before diagnosis with 0.18% per year (p=0.0006), whereas after diagnosis it changed not-significantly. **CONCLUSIONS:** Among users of GLDs, HbA1c decreased with 0.12%-0.18% (1-2 mmol/mol) per year before CRC diagnosis. Only among CC patients, HbA1c increased after diagnosis (0.12% per year; 1.3 mmol/mol). In (un)diagnosed cancer patients the HbA1c measure to visualise glycaemic control might be influenced by anti-anaemic preparations.

#### PCN46 THE TREATMENT PATTERNS OF CASTRATION RESISTANT PROSTATE CANCER IN JAPAN

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**OBJECTIVES:** Castration resistant prostate cancer (CRPC), which occurs in 10-20% of patients with prostate cancer (PC), has had a historically poor prognosis. However, there are a number of emerging treatment options. The aim of this study was to describe the real-world treatment patterns of CRPC in Japan. **METHODS:** A retrospective chart review of patients with mCRPC (N=445) was conducted from December 2014 to February 2015 with urologists (N=176) from online physician panels. Charts from the most recent patient visits meeting the inclusion criteria were used. Patient demographics, health history, healthcare resource use, treatment information, and clinical outcomes were entered into an online data collection form. **RESULTS:** Patients (N=445) were an average of 73.57 years old (SD=8.34), had been diagnosed with PC for 5.12 years (SD=6.22), and had been castration resistant for 2.31 years (SD=1.98). Androgen deprivation therapy was used among 43.64% of patients in 1st line and 40.68% in 4th line. Enzalutamide and abiraterone were also common, though more so in later lines because of their recent availability (used among 14.46% and 8.73%, respectively, of patients in 1st line and 40.68% and 20.34%, respectively, in 4thline). NSAIDs and opioids were used frequently for pain management. The presence of symptomatic skeletal events (SSEs) was uncommon (2-3% within each treatment line) but associated with an increased use of opioids, strontium-89, bisphosphonates, and NSAIDs (all p<.05). Patients who experienced an SSE at any point (N=24) reported significantly more annualized post-SSE physician visits (Adjusted means=23.46 vs. 12.13) and general ward hospitalizations (Adjusted means=2.23 vs. 0.71) than those without an SSE (N=421; all p<.05). **CONCLUSIONS:** Novel anti-hormone therapies are widely accepted in clinical practice, becoming more common than chemotherapy. The results also suggest that SSEs are associated with more medical resources and analgesics, highlighting the unmet medical needs for treatment of bone metastases.

#### PCN47 USE PATTERN NARCOTIC ANALGESICS FOR CANCER PATIENT IN SOUTH KOREA : CLAIMS DATA ANALYSIS

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**OBJECTIVES:** To control such cancer pain, it is necessary to select analgesics depending on the intensity of cancer pain, referring to the WHO-recommended 3 step analgesic ladder. This study aimed to provide the Use pattern narcotic analgesics for cancer patient in Korea using claims data. **METHODS:** To define terminal cancer and severely ill patients close to death who are assumed to be suffering severe pain, 0-120 year old cancer patients who received at least one prescription of a 'C00-C99' code within top 6 ranks of main disease code and subordinate disease code over 4 years between 2008 and 2011 have been examined. Among those patients, 203,493 patients who confirmed as 'Death' in the clinical endpoint and had the date of death were defined as cancer deaths. The status of their narcotic analgesics use was analyzed at 1 month prior to death, 2 months before death, and 3 months before death. **RESULTS:** The use rate of narcotic analgesics in cancer deaths at 1 month prior to death was 82.6% (168,002 patients). By level of a healthcare facility, prescription frequency was the highest for Morphine, followed by Fentanyl, and Oxycodone for hospital or higher levels at 1 month prior to death. However, Tramadol was most frequently prescribed in nursing hospitals and clinics. And Pethidine which is not a recommended narcotic analgesic for cancer pain patients was prescribed for 38.5% of the entire narcotic analgesic users. The daily amount of narcotic analgesics at 1 month before death is