tion). **CONCLUSIONS:** Disability in cancer survivors is very common and is more severe than in other diseases.

PCN145
IMPACT OF NURSING AND PHARMACY CARE BETWEEN CAPECITABINE AND 5-FLUORURACIL REGIMENS IN THE MANAGEMENT OF ADVANCED ESOPHAGO-GASTRIC CANCER IN HONG KONG
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OBJECTIVES: To compare the possible time savings from reduction of nursing and pharmacy time to manage advanced esophago-gastric cancer (AEGC) patients using capecitabine-based regimens versus traditional 5-FU based intravenous (IV) chemotherapy in the Hong Kong public hospital setting. **METHODS:** This was a time-and-motion study conducted in 2 public hospitals of Hong Kong based on the simulation of previously data on both capecitabine-based regimen (XELOX and XP) and IV 5-FU-based regimen (FOLFOX and FP). The preparation, dispensing and administration time for XELOX, XP, FOLFOX and FP were compared. The capital item utilization including hospital bed, infusion pump etc and length of patient attendance were recorded. Each subject was based on 24-week cycle in the analysis. The projected cost saving in nursing and pharmacy time was estimated if all AEGC in Hong Kong were prescribed capecitabine-based regimen. **RESULTS:** The average nursing time for FOLFOX and FP was 83.7 and 83.4 minutes versus XELOX and XP was 33.7 and 39.8 minutes respectively. The average pharmacy dispensing time for FOLFOX and FP was 25.3 and 71.4 minutes versus XELOX and XP was 18.7 and 19.9 minutes respectively. The total time saved for each patient for a 24-week cycle in FOLFOX versus XELOX was 734.8 minutes in nursing and 154.0 minutes in pharmacy as well as in FP versus XP was 182 minutes in nursing and 269.2 minutes in pharmacy. Nursing and pharmacy could potentially spare 3.3 full time equivalent (FTE) and 1.5 FTE if all AEGC patients were converted to capecitabine-based chemotherapy. **CONCLUSIONS:** Capecitabine-based chemotherapy regimens saved in both nursing and pharmacy time as compared to traditional 5-FU based IV chemotherapy in the Hong Kong public hospital setting.

PCN146
WORKFORCE PARTICIPATION AND PRODUCTIVITY LOSSES AFTER HEAD AND NECK CANCER
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OBJECTIVES: There has been no estimate of the productivity losses associated with head and neck cancer (HNC) conducted using bottom-up data, or beyond premature mortality. The aim of this work is to investigate workforce participation, and estimate the productivity losses associated with temporary and permanent work absence, reduced work hours, and premature mortality in individuals with HNC in Ireland. **METHODS:** Survey data were collected from a cancer registry identified cohort of individuals in Ireland diagnosed with head and neck cancer between January 1994 and December 2011. Data collected included employment status at time of diagnosis and workforce participation patterns following diagnosis. These data were combined with population-level survival estimates and national wage data to estimate the value of temporary and permanent work absence, reduced work hours and premature mortality using a Human Capital Approach. **RESULTS:** Of the survey respondents, 276 were in paid work at the time of diagnosis. 88% had time off following diagnosis, with 63% of these returning to work. The mean (median) time off work was 9 months (6 months), range of 0 to 65 months. Seventy percent of individuals returning to work reported reducing the hours they worked, by an average of 20 hours per week. Preliminary results show the average productivity losses per person associated with temporary and permanent work absence and reduced work hours are €222,000. Productivity losses associated with premature mortality and the results of sensitivity analyses to test discount and wage growth rates will also be presented. **CONCLUSIONS:** Head and neck cancer and its treatment can have a profound impact on workforce participation. This affects not only the individuals' and their families, but also society in terms of productivity costs. These costs should be considered in economic evaluations of cancer treatments and health service delivery in this population.

PCN147
HOSPITAL RESOURCES CONSUMPTION ASSOCIATED WITH TRASTUZUMAB TREATMENT IN BREAST CANCER IN PORTUGAL
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OBJECTIVES: Determine the costs associated with the preparation and administration, considering the material resources (MR) consumption and time spent by the health care professionals (HP), of Her2 positive breast cancer treatment with trastuzumab intravenous (iv) and to estimate the difference compared with a subcutaneous (sc) formulation. **METHODS:** Data were collected in face to face interviews with the pharmacist and nurse responsible for the preparation and administration of trastuzumab in each hospital. The cost of the HP time was calculated by multiplying the value of each HP hour by the average time of each procedure; MR costs were determined based on the values presented in official sources or in price table provided by the manufacturer. **RESULTS:** Five public and two private Hospitals from mainland Portugal, with an average of 12 patients with HER2 + breast cancer treated with trastuzumab iv, per week, participated in the study. The average time spent by the HP in trastuzumab preparation and administration was 79 minutes for iv and 18 minutes for sc. Per treatment cycle, the estimated average overall cost of each treatment was €43.22 (HP - €26.01; MR - €17.21) for iv, and €3.18 (HP - €3.13; MR - €0.05) for sc. Considering the total course of treatment (18 cycles), the treatment with trastuzumab iv is estimated at €777.96 versus €57.19 on sc treatment. **CONCLUSIONS:** Trastuzumab sc formulation would potentially allow savings of approximately €720 per patient, and provide an important benefit to the patients. Trastuzumab sc would also contribute to maximize the efficiency and effectiveness of health resources. This study presents a limitation regarding the subjectivity inherent to costs determination based on answers given by the HP. Moreover values may be underestimated due to lack of information regarding fixed costs.

PCN148
RESOURCE USE OF NON-SMALL CELL LUNG CANCER IN SLOVAKIA
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OBJECTIVES: Data on economic burden of advanced or metastatic non-small cell lung cancer (NSCLC) are lacking in Slovakia. Therefore, the objective of this cost of illness study was to measure the resource utilisation and the costs associated with treating advanced or metastatic NSCLC in Slovakia and provide a basis for cost-effectiveness evaluations. **METHODS:** The project was run in two phases: in the first phase an Expert panel took part in the survey and developed the diagnostic and treatment algorithms to reflect the local medical practice and quantify the use of resources associated with anticancer drug treatment, management of adverse events and best supportive care. Then, in the second step, 2012 management costs were applied to the resources. All types of health care used in the NSCLC management were evaluated (outpatient and inpatient visits, diagnostics, prescription drugs and examinations). The analysis was performed from the Slovakian health insurance perspective reflecting direct medical costs only. The structure of cost data follows the requirements of pharmaco-economic modelling in NSCLC. **RESULTS:** Monthly costs of advanced or metastatic NSCLC management during the active treatment (before progression) count for €1055.67, during the disease progression €1101.21 and on the best supporting care €1561.22. The most frequent regimens were cisplatin+gemcitabine (20.6%) and cisplatine+pemetrexed (19.1%) in the first line, erlotinib (49.1%) in the second line and gemcitabine (29.6%) in the third line. The most costly side effects were renal toxicity (€1060.85), febrile neutropenia (€902.92), hemoptysis (€717.08), anaemia (€668.84), pain (€631.34), leukopenia/neutropenia (€629.58), dyspnoe (€628.35), thrombocytopenia (€578.60), nausea/vomiting (€562.72) and fatigue (€523.19). **CONCLUSIONS:** Cost-effectiveness must be demonstrated in order to get reimbursement in Slovakia and local resource use data are key drivers for health economic modelling and can guide resource allocation decisions in NSCLC. This study provides important information to support these decisions.

CANCER – Patient-Reported Outcomes & Patient Preference Studies

PCN149
ADHERENCE RATES FOR INTRAVENOUS CHEMOTHERAPY REGIMENS TO TREAT COLON CANCER
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OBJECTIVES: It is widely thought that adherence rates to intravenous (IV) chemotherapy regimens for colon cancer are high. However, there are no known formal assessments of this issue. **METHODS:** A retrospective analysis was performed using the Optuminsight Oncology claims database. Patients aged 18 years and older, diagnosed with CRC between July 1, 2004 and December 31, 2010, who were insured by a commercial health plan were included in the study. Adherence to the following IV chemotherapy regimens was assessed using the National Comprehensive Cancer Network (NCCN) guidelines as the standard for expected cycle/regimen duration: FOLFOX, FOLFOX+bevacizumab, FOLFIRI, and FOLFIRI+bevacizumab. Adherence was assessed using the medication possession ratio (MPR), calculated as the number of days a patient was covered by their chemotherapy regimen, according to NCCN guidelines, divided by the number of days elapsed from the first to the last infusion of that regimen. **RESULTS:** A total of 46,941 chemotherapy cycles in 6,880 patients were analyzed. Overall, adherence rates to IV chemotherapy was fairly high, with mean MPR ranging between 0.84 and 0.88 for these regimens. However, a substantial proportion of patients for each regimen experienced low adherence. Twenty five percent of patients receiving FOLFOX, FOLFOX+bevacizumab, and FOLFIRI+bevacizumab regimens experienced MPR<0.8. Additionally, approximately 35% of patients receiving FOLFIRI experienced an MPR<0.8. At least 10% of patients receiving FOLFOX regimens had an MPR less than 0.7; while at least 10% of patients receiving FOLFIRI regimens had an MPR of less than 0.6. **CONCLUSIONS:** Although overall rates of adherence were fairly high, a substantial subpopulation experienced low adherence to each of these IV regimens per NCCN guideline recommendations. The reasons for the low adherence rates need to be explored as this could have an impact on efficacy. These results also highlight the drawback of relying solely on summary statistics at the population level.

PCN150
PERSISTENCE IN PATIENTS WITH BREAST CANCER TREATED WITH TAMOXIFEN OR AROMATASE INHIBITORS- ANALYSIS BASED ON ONCOLOGY ANALYZER DATABASE
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OBJECTIVES: Lack of non-compliance is often underestimated in breast cancer treatment. The aim of our study was to analyze the persistence with tamoxifen (TAM) and aromatase inhibitors (AI) in women with breast cancer (BC) and to identify reasons of treatment discontinuation and determinants of non-persistency. **METHODS:** We used data of the Oncology Analyzer database, which includes individual information on patient history related to the treatment of patients across all cancer types. This enables a complete overview of cancer patient care from diagnosis onward, facilitating research in areas such as treatment changesn, dosing and regimen compliance, market sizing and off-label use. We identified 7063 breast cancer patients with a start of TAM or AI therapy from 1990 until 2011 and with a treatment duration of at least 365 days. **RESULTS:** After

one year of follow up, 11.2% of TAM, and 18.4% of AI treated patients discontinued their treatment. In these patients with , the reasons for stopping were: progressive disease including local and distant progression (68.1%), side effects (15.5%), patient's choice (8.6%) and other reasons (7.8%). The multivariate hazard ratios of the cox regression models showed that patients younger than 50 were most likely to discontinue initial therapy when compared with the reference group of women over 70 years of age (HR: 2.30, p=0.01). In contrast, patients treated in gynaecologist or oncologist practice had significantly longer persistence than patients who obtained their prescriptions in general hospital or academic cancer facility (HR: 0.47, p=0.02). Additionally, patients with therapy initiation in gynecological practices had significantly longer persistence than in oncological practice (HR: 0.68, p=0.04). Additionally, metastases were associated with strongly increased risk of treatment discontinuation (HR: 3.81, p<0.01). **CONCLUSIONS:** The proportion of breast cancer patients with therapy discontinuation within first year after therapy start is high and needs to be significantly increased to improved outcome in clinical practice.

PCN151

HEALTH STATE UTILITY VALUES IN ADVANCED NON-SMALL CELL LUNG CANCER PATIENTS

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OBJECTIVES: Lung cancer has an important impact on Health related Quality of Life (HRQoL). LUCEOR2 is a multi-country prospective study which aimed to measure HRQoL and EQ-5D utility values in Non Small Cell Lung Cancer patients (NSCLC). Previous results presented utility values calculated on the whole LUCEOR2 population and on the French subgroup using the UK tariff for the EQ-5D. Our aim was to calculate utility values with the French tariff for the application in French cost-effectiveness studies. **METHODS:** Data from the LUCEOR2 study that included all patients from participating countries which provided a meaningful sample size for data analysis. Patients were stratified in 7 health states defined by the response of treatment (progressive or stable) and the line of treatment (1st, 2nd, 3rd/4thand BSC). EQ-5D health states were valued using the French tariff. **RESULTS:** A total of 319 patients were recruited in LUCEOR2, HRQoL were available for 258 of them (73 in France). Mean utilities for progression-free patients on 1st, 2nd and 3rd/4th lines were 0.690 (n=116; standard deviation [sd]: 0.258), 0.697(n=46; sd: 0.221) and 0.609(n=25; sd: 0.324) respectively. For patients with progressive disease, values were 0.608(n=26; sd: 0.237), 0.550(n=17; sd: 0.353) and 0.418(n=21; sd: 0.399). Overall, patients with progressive disease had lower mean utility than patients with stable disease (0.530 vs. 0.682 ; p=0.001). Utilities calculated using the French EQ-5D tariff are lower than the utilities calculated using the UK tariff. **CONCLUSIONS:** This study presents the French utility values for patients with NSCLC. It demonstrates the impact of the disease on the HRQol. Further investigations will be made on the potential differences in scores between countries.

PCN152

ESTIMATING HEALTH STATE UTILITIES FOR PATIENTS WITH RELAPSED/ REFRACTORY (R/R) HODGKIN LYMPHOMA (HL) AND SYSTEMIC ANAPLASTIC LARGE-CELL LYMPHOMA (SALCL) IN MEXICO AND BRAZIL

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OBJECTIVES: Benefits of treatment can be measured by utility values. Health utilities typically range between 0 (dead) and 1 (full health) and reflect health-related quality of life (HRQL) in a given health state. Societal values for health states can be captured using the time trade-off (TTO) methodology. Currently, no values exist for health states depicting stages of R/R HL and sALCL for Latin American countries. The aim of this study was to collect utility values from members of the public in Mexico and Brazil for R/R HL and sALCL health states. **METHODS:** Health states were developed using recognized methods, including a literature review, patient and clinician interviews, and cognitive debriefing. States included stages of R/R HL and sALCL (complete response [CR], partial response [PR], stable disease, and progressive disease), and adverse events (AEs) including B-symptoms, acute/chronic graft-versus-host disease (GVHD), and grade I/II or grade III peripheral sensory neuropathy (PSN). Members of the public in Mexico (n=100) and Brazil (n=101) valued each health state using the TTO methodology. **RESULTS:** Participants showed a clear preference for the treatment response states; CR was valued as the state least likely to affect HRQL, with utility gains of 0.13–0.14 over stable disease. The experience of any AE was associated with a large decline in quality of life. The most burdensome AEs were acute GVHD and grade III PSN. Experiencing acute GVHD gave a disutility from stable disease of 0.190 (for Brazil) and 0.125 (for Mexico). Only minor discrepancies existed between the mean utilities for the two countries, the largest being for PR (Mexico, 0.633; Brazil, 0.717). **CONCLUSIONS:** Societal valuation of health states for R/R HL and sALCL revealed the notable perceived benefit of a treatment response and the significant disutility associated with AE experience. Utility values for Mexico and Brazil were broadly consistent.

PCN153

UTILITY VALUES FOR PATIENTS WITH ADVANCED GASTROINTESTINAL STROMAL TUMORS (GIST) TREATED WITH REGORAFENIB VERSUS PLACEBO IN THE PHASE III GRID TRIAL

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OBJECTIVES: To estimate utility values by health states for regorafenib and placebo-treated subjects from the phase-3 *GIST – Regorafenib In Progressive Disease* (GRID) trial, and test the assumption that utility values remained constant over successive cycles of treatment in the same health state. **METHODS:** The GRID study included a double-blinded phase, plus an open-label regorafenib phase for those whose disease progressed. The EQ-5D index was evaluated using paired-samples comparison as the primary analysis, and repeated measures as a sensitivity analyses. **RESULTS:** A total of 185 subjects were included; 63% males, with an overall average age of 58 years; 55% received study treatment as 3rd-line, the rest as 4th-line or later. 67% were randomized to receive regorafenib as initial double-blind therapy. Average utility at baseline was 0.767 units. There were no differences in baseline characteristics or EQ-5D for either treatment arm, or those whose disease progressed. The paired-samples analysis compared progression-free EQ-5D index versus any first, post-progression assessment. Of those with available data (N=77) there was a difference of -0.120 units (p=0.001). In the repeated analysis, the Δ-EQ-5D between progression-free disease and disease progression (in double-blind phase) was -0.041 units (p=0.051). The mean EQ-5D index following discontinuation of open-label treatment due to secondary progression was much lower, with a difference of -0.231 units (p<0.001). Whilst adjusting for disease status and treatment, the cycle number did not significantly influence the EQ-5D index (p=0.341). **CONCLUSIONS:** Heath-related utility remained stable over successive treatment cycles after controlling for disease status and treatment type, suggesting that for subjects treated with regorafenib who remained progression-free, that active treatment did not lead to deterioration in utility. Due to the cross-over design, the repeated measures analysis did not contain a homogenous, group of people whose disease had progressed. Thus, the paired-sample analysis provides a better estimate of utility.

PCN154

ASSOCIATIONS BETWEEN OVERALL CARE EXPERIENCE RATINGS AND UTILITY AND PSYCHOLOGICAL WELL-BEING IN MEN RECENTLY DIAGNOSED WITH PROSTATE CANCER: FINDINGS FROM A POPULATION-BASED STUDY

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OBJECTIVES: Patient experience is increasingly recognised as an important measure of quality of care. A few studies have suggested that patients who report higher levels of satisfaction with care also have higher quality-of-life and higher psychological wellbeing, and are more likely to cooperate with treatment. In Ireland, this area is under-researched. The PiCTure 2 study aimed to assess the care experiences of men recently diagnosed with prostate cancer – the most common cancer among men in Ireland - and investigate associations between experiences and health-related quality-of-life (utility) and psychological wellbeing (depression, anxiety and distress). **METHODS:** Men diagnosed with invasive prostate cancer (ICD10 C61) 5-20 months prior to study commencement were identified through the National Cancer Registry. The patient experience questionnaire was based on the Prostate Care Questionnaire (Baker et al. 2007), modified for Ireland. Utility and psychological wellbeing were assessed using the EQ5D-5L and Depression Anxiety and Stress Scale (DASS-21). The questionnaire was administered by post to 2,180 men during January-April 2013. EQ5D-5L responses were converted to EQ5D-3L health states and valued with UK valuations. **RESULTS:** A total of 1499 valid questionnaires were received (response rate=70%). Men rated their overall care very highly; however, there were variations with those (i) further from diagnosis, (ii) in poorer health, (iii) younger, (iv) with third level education and (v) with private health insurance significantly more likely to report poorer care experiences. Almost half of men reported maximum utility scores; one-fifth had depression, one-fifth anxiety and one-eighth stress. Lower global experience scores were significantly associated with lower utility values and poorer psychological well-being (p<0.001). **CONCLUSIONS:** While men recently diagnosed with prostate cancer report quite high overall care experience ratings, variations were reported and associations with lower utility and psychological well-being were observed. These results provide further rationale for initiatives to improve quality of care.

PCN155

UTILITY MAPPING OF THE EORTC QLQ-C30 ONTO EQ-5D IN PATIENTS WITH SOFT TISSUE SARCOMA

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OBJECTIVES: The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 (EORTC QLQ-C30) is one of the most commonly used quality of life instruments in clinical trials of anti-cancer agents. Here we present an algorithm for mapping between the QLQ-C30 and EQ-5D preferences in an adult population with advanced soft tissue sarcoma (aSTS) who participated in the PALETTE trail, building upon mapping work performed in other tumours. **METHODS:** Data from the PALETTE trial assessing pazopanib versus placebo for the treatment of aSTS (n=369) was used, where EQ-5D was assessed at baseline and week 4, and the QLQ-C30 at baseline plus weeks 4, 8 and 12. Ordinary least squares (OLS) and generalised linear model regression using a generalised estimating equations (GLM/GEE) approach was employed with the EQ-5D disutility value as the dependent value. A variety of model forms were tested with different link functions and error term distributions, as well as using two stage models and including factors other than QLC-C30 terms (i.e., age, sex, ECOG status). **RESULTS:** There was relatively little variability in the root mean square error (RMSE) and R-squared across 28 different models tested, with the RMSE ranging from 0.16 to 0.18 and the R-squared ranging from 0.54 to 0.63. Using GLM/GEE vs. OLS, adding non QLQ-C30 terms, two-stage models, and squared terms for QLQ-C30 scores all improved R^2, albeit slightly. All the models overestimated the disutility for assessments with zero disutility and underestimated the disutility for assessments with large disutilities, as has commonly been reported for such algorithms. **CONCLUSIONS:** The mapping algorithms tested had reasonable predictive validity. These algorithms were used in cost-effectiveness evaluations of pazopanib in aSTS patients and may be useful for future cost-effectiveness evaluations of other therapies for this indication.