

vided 0.30 and Docetaxel 0.31. Therefore, Erlotinib therapy is positioned as a dominant (more effective and less costly) compared to Docetaxel and Pemetrexed. These results were consistent in the sensitivity analysis, giving strength to them. Therefore, Erlotinib could represent annual savings of \$5860 compared to Docetaxel and \$7090 with Pemetrexed per patient. Additionally, Erlotinib contributes to costs reduction in patients with NSCLC, because it is a chemotherapy administered orally, instead of an intravenous infusion, and with a better safety profile with no hematologic toxicity in comparison with standard chemotherapy. **CONCLUSIONS:** The cost-utility analysis of the use of Erlotinib vs. Docetaxel or Pemetrexed in the treatment of previously treated metastatic or advanced NSCLC showed that Erlotinib is a cost-effective therapy because it consumes fewer resources to obtain clinical success. Under the perspective of the Mexican public health system Erlotinib is dominant alternative in second-line treatment for patients with advanced or metastatic NSCLC.

PCN91

CONSUMPTION OF ANTINEOPLASTIC AGENTS IN THE SLOVAK REPUBLIC WITHIN THE PERIOD OF 2008-2011

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OBJECTIVES: Cancer is the second leading cause of death in the Slovak Republic with 23 000 new cases diagnosed every year and highest incidence in age group over 60. Antineoplastic agents prevent or inhibit the maturation and proliferation of neoplasms. The main objective of this study was to evaluate the consumption of antineoplastic agents in Slovak Republic within the period of 2008-2011. **METHODS:** Analysed data were abstracted from the Slovak Institute of Drug Control and provided by wholesalers due to their legal obligation towards the SIDC. Processed informations include the number of medicine packages and financial expenditures. **RESULTS:** There was a gradual rise in antineoplastic agents utilisation in terms of financial expenditures from 98 605 418 € in 2009 to 105 786 256 € in 2011. Third quartal of 2010 was hitting a peak with 27 261 629 € respectively while the first quartal plummeted to 23 307 249 €, which presents the lowest performance within followed period. Number of packages rose sequentially from 513 193 in 2008 to 593 067 in 2011. Average price per package was fluctuating from 168 € in 2010 to 192 € in 2008. Highest financial decline was observed in group of plant alkaloids and other natural products (from 12 977 717 € in 2008 to 6 840 618 € in 2011). Most significant expenditures increase from the group of antineoplastic agents reached capecitabine with 3 491 954 € in 2008 and 4 560 623 € in 2011. Its number of packages almost doubled from 8 725 in 2008 to 14 145 in 2011. **CONCLUSIONS:** The slight rise in consumption of antineoplastic agents is caused by higher incidence and prevalence and better diagnose of cancer disease in Slovak population. Higher use of capecitabine can be interpreted in pursuance of breast and colorectal cancer occurrence.

PCN92

THE LIFECYCLE VALUE OF ONCOLOGY MEDICINES

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OBJECTIVES: Innovative pharmaceutical treatments contribute significant value for improving and extending the lives of cancer patients. Many innovative oncology products become standard of care and continue to produce significant value well beyond the period of innovator exclusivity. Current tools used to guide 3rd party funding decisions are made at the beginning of product lifecycles and fail to account for the long-term stream of value, particularly from acquisition cost reduction after innovator exclusivity. The objective of this study was to propose a framework to highlight this important aspect for determining the value of new drug innovation using two case studies. **METHODS:** The drugs selected for the case studies were paclitaxel and azacitidine. Pharmacoeconomic studies evaluating these agents were identified. Applying off-patent prices after exclusivity, a lifecycle ICER was determined by annually amortizing the ICER value over the potential useful life of a product. Results are in Canadian dollars. **RESULTS:** Paclitaxel remains a standard of care in advanced ovarian and breast cancer even after innovator loss of exclusivity in 2004. Using the current off-patent price, the lifecycle ICER for paclitaxel is estimated to be approximately \$26,000 per QALY. Azacitidine has become the standard of care for higher-risk MDS in Canada. It is anticipated that azacitidine will remain part of standard care beyond innovator exclusivity. Assuming a 25% reduction in acquisition cost and a further 10 year useful life, the lifecycle ICER for azacitidine is estimated to be approximately \$36,000 per QALY. **CONCLUSIONS:** Many innovative oncology medicines provide significant societal value well past the period of innovator exclusivity. Current approaches for assessing economic value fail to recognize this unique aspect and may be undervaluing new oncology medicines. Therefore, approaches should evolve to better account for the societal value a product produces over its useful life span.

CANCER – Patient-Reported Outcomes & Patient Preference Studies

PCN93

ENDOCRINE THERAPY ADHERENCE AND PERSISTENCE AND SURVIVAL AMONG WOMEN WITH BREAST CANCER IN BRAZIL

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OBJECTIVES: Identify explanatory variables of hormone therapy (HT) adherence and persistence (A&P) in women with breast cancer (BC), and evaluating the effect

of such variables in BC survival rates. **METHODS:** Retrospective longitudinal data from a cohort of 5861 women with BC, submitted to HT, was put together through linkage of the Brazilian National Cancer Institute datasets, including the control of medicines delivered at its Pharmacy. A logistic regression model was applied to study adherence. Cox proportional hazard models were used to estimate persistence and BC survival. **RESULTS:** The proportion of treatment adherent was 75.3%. At the end of the first and the fifth year of treatment, respectively, overall persistence to treatment was 79% and 31%, and survival was 94% and 71%. Similarly, better A&P to treatment, as well as BC survival, were associated with higher education, having a partner, lower cancer stages, being submitted to surgery, having less inpatient care, making outpatient visits to a Mastologist and a Clinical Oncologist, and the need of less exams. Older women were more likely to adhere and to persist to treatment, but those aged 70 years old or more presented higher hazard of death. Alcoholism and tobacco use was associated with lower A&P. Longer time between diagnosis and the beginning of HT and cancer family history were, respectively, a risk and a protective factor to treatment persistence and survival. Psychotherapy was protective for adherence and survival. Finally, treatment adherence was positively associated with BC survival, being combined tamoxifen and aromatase inhibitor explicative of lower adherence, while only aromatase inhibitor use was associated with higher hazard of death. **CONCLUSIONS:** In this cohort, of the patients did not adhere, only 31% completed the 5-year hormone treatment, and 71% were alive after five years. Socio-demographic, behavioral, clinical and health care aspects explained partially variations in these dependent variables.

PCN94

HOW REMAINING YEARS OF LIFE ARE TRADED? – A FEASIBILITY STUDY TO EXPLORE THE APPLICABLENESS OF TIME-TRADE-OFF METHOD IN CHRONIC MYELOID LEUKEMIA OUTPATIENTS TREATED WITH IMATINIB IN TAIWAN

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OBJECTIVES: Since the launch of Imatinib, the survival of chronic myeloid leukemia (CML) has significantly improved, but also caused enormous increase in long-term costs of CML care. Neither health-related utility of CML patients nor long-term cost-effectiveness of imatinib, however, has been investigated in Taiwan. This feasibility study aims to explore the applicability of time-trade-off (TTO) to measure utility of CML patients treated with imatinib. **METHODS:** This cross-sectional study was conducted at a medical center in southern Taiwan from June 2011 to January 2012. Outpatients with defined diagnosis of CML and receiving imatinib were invited to participate. After TTO measurement, semi-structure interviews were conducted to explore participants' perceptions. The interviews were audiotaped, transcribed verbatim and analyzed by constant comparison until saturation. **RESULTS:** Of all, 22 (mean age: 52.4±15.83 years, male: 63.6%) of the 24 participants completed the study. The average utility was 0.774±0.219. Most participants accepted current health status and life expectancy, and considered current health status is not different from ideal situation. Mid-age participants traded off life span with parenting duty, while the elderly considered companion time with their partners. For those who chose shorter life span with better health, the main concern was financial burden to family because the disease-related fatigue constrained activity and work ability. In addition, regular medical treatment was also considered by those who desired better career paths, long-term traveling and those consisting of multi-comorbidity. Moreover, uncertainty about future, limited social support and financial difficulty were also the reasons for trading off. **CONCLUSIONS:** TTO is applicable to measure utility for CML patients. Participants receiving imatinib generally presented satisfactory health status and trading remaining years of life with other concerns. To validate this tool, further studies need to explore utilities of patients with disease symptoms or drug-related side effects, and compare the results with disease-specific measures.

PCN95

USING A CONDITION-SPECIFIC MEASURE OF PATIENT-REPORTED OUTCOMES TO DERIVE UTILITIES IN MYELOFIBROSIS

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OBJECTIVES: The limitations of generic preference-based measures in disease areas such as oncology are widely recognised. Condition-specific measures offer more relevant assessments of health and can be used to derive utilities. The aim of this study was to use data collected with the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire for Cancer (QLQ-C30) in a myelofibrosis clinical trial to derive utilities. **METHODS:** QLQ-C30 data were collected over 48 weeks in an open-label trial of ruxolitinib (n=146) versus best-available therapy (BAT) (n=73). Two algorithms were used to map QLQ-C30 scores to utilities: the first mapped to EQ-5D utilities, the second to condition-specific preference weights using a QLQ-C30 item subset (EORTC-8D). Changes from baseline (CFB) in utilities were calculated by treatment at week 48. Mean utilities by presence of constitutional symptoms (CS) (weight loss, fever or night sweats) and response (≥35% reduction in spleen volume from baseline) were also derived. **RESULTS:** Mean (SE) utility CFB from the EQ-5D algorithm was 0.082 (0.025) for ruxolitinib and 0.012 (0.040) for BAT. From the EORTC-8D algorithm, mean (SE) CFB was 0.038 (0.013) for ruxolitinib and 0.013 (0.021) for BAT. Patients without CS had higher mean (SE) utilities than patients with CS using both algorithms—EQ-5D, 0.730 (0.017) without and 0.539 (0.031) with CS; EORTC-8D, 0.818 (0.009) without and 0.719 (0.016) with CS. Similarly, patients defined as responders had higher mean (SE) utilities than nonresponders using both algorithms—EQ-5D, 0.754 (0.029) for responders and 0.670 (0.024) for nonresponders; EORTC-8D, 0.843 (0.015) for re-