plete cytogenetic and molecular. Prognosis was assigned to each category, according to the degree of progression and mortality. Unit costs were drawn from national databases, and multiplied by resource use (driven by response level and disease status) to estimate total costs. Health benefits were measured using quality-adjusted life years (QALYs), based on patients' health status and response. Univariate and probabilistic sensitivity analyses were conducted to estimate confidence around the results.

RESULTS: Dasatinib resulted in 6.425 QALYs, at a total cost of €314,413, per patient. 400mg and 600mg dosages were compared: dasatinib 400mg, $113,536; dasatinib 600mg, 2,994, £137,705; imatinib 800mg, 5,910, £350,365; nilotinib, 6,215, €228,576; interferon-a, 1,664, 6,764, BMT, 4,738, €202,937. Incremental cost-effectiveness ratios (ICER) for dasatinib against competitors were as follows: imatinib 400mg, €36,251; imatinib 600mg, €34,907; imatinib 800mg, dominant; nilotinib, dominant, interferon-a, €38,877. Dasatinib, dominant; interferon-a, €38,877. Dasatinib, dominant; interferon-a, €38,877.

METHODS: Decision analysis (DA) was used to determine the cost-effectiveness of different treatment options for patients with advanced phase chronic myelogenous leukemia (CML). The analysis estimated QALYs gained. To be less costly than imatinib 800mg, nilotinib, and BMT, dominating these treatments in the cost-effectiveness analysis. Dasatinib is therefore a cost-effective treatment option for patients in the CP of CML.

PCN71 USING MEASURES OF SOCIETAL VALUE AND ECONOMIC MODELING TO ESTIMATE PRICES FOR CANCER DRUGS IN SOUTH AFRICA

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OBJECTIVES: One of the major issues in the provision of cancer drugs is the economic assessment of new cancer drug access, which is often by the means of national health care budgets in developed countries. In this study, we present a novel approach to estimate a value based price for new cancer drugs that considers the wealth of a nation. To demonstrate this approach, pharmacoeconomic analysis modeling was used to estimate a value based price for bevacizumab, a drug that provides a 1.4 month survival benefit to patients with metastatic colorectal cancer (mCRC). The threshold used for economic value was 3 times the South African per capita gross domestic product (GDP), as recommended by the World Health Organization (WHO). METHODS: A PE model was developed to simulate the outcomes in mCRC patients receiving chemotherapy - bevacizumab. Clinical data were obtained from randomized trials and costs from a South African cancer center. Utility estimates were determined by interviewing 16 oncology nurses involved in the care of mCRC patients. A price per dose of bevacizumab was then estimated using a target threshold of $US32,000 per quality adjusted life year (QALY) gained, which is 3 times the South African per capita GDP. RESULTS: A cost effective price for bevacizumab could not be reached because of the short survival benefit. If the drug were able to improve survival from 1.4 to 3 or 6 months, then the price per dose could be $US32,000 and $US51,280 and be considered cost effective in South Africa according to the WHO criteria. CONCLUSIONS: A value based pricing approach using PE modeling and the WHO criteria for economic value is feasible for South Africa. This approach would be a good starting point for opening dialogue between medical schemes and the pharmaceutical industry to identify an optimal drug price that would be acceptable to all of the key stakeholders.

PCN72 GENE EXPRESSION PROFILING FOR GUIDING ADJUVANT CHEMOTHERAPY DECISIONS IN WOMEN WITH EARLY BREAST CANCER: A COST-EFFECTIVENESS ANALYSIS OF 1000 STRATEGIES FOR THE PROVISION OF ADJUVANT ONLINE, ONCOTYPE DX AND CHEMOTHERAPY

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OBJECTIVES: Adjuvant chemotherapy decisions for women with early-stage breast cancer are complex. Oncotype DX, a gene expression profiling test, is validated at predicting distant recurrence-free response in patients with ER+ LN- early-stage breast cancer. This enables chemotherapy to be better targeted at higher risk patients than is possible through the use of Adjuvant Online (AOL) or clinical judgement alone. However, existing cost-effectiveness analyses of Oncotype DX have numerous limitations: in particular, they consider a limited range of strategies and do not separately consider intermediate risk patients identified through either AOL or Oncotype DX. Our objective was to build an Ontario-based cost-effectiveness analysis which comprehensively addresses these limitations. METHODS: We built upon a Markov model developed by Tsoi and colleagues, using data from the NSABP B-14 and B-20 clinical trials. We assumed that AOL and Oncotype DX may be provided separately or sequentially and considered the chemotherapy decision separately at every possible node. We estimate that resulting in 100 strategies with cost effectiveness values for the provision of AOL, Oncotype DX and chemotherapy. RESULTS: Oncotype DX appears cost-effective for all patients, regardless of a patient's initial AOL risk assessment. The highest ICER is in patients at low AOL risk ($29,000 per QALY), while Oncotype DX dominates in patients at high AOL risk. Chemotherapy is cost-effective for all patients at intermediate or high Oncotype DX risk. The highest ICER is in patients at low AOL and intermediate Oncotype DX risk ($64,000 per QALY). Chemotherapy is dominated in patients at low Oncotype DX risk. CONCLUSIONS: Oncotype DX appears to be cost-effective for all Ontario women with ER+ LN- early-stage breast cancer, regardless of the woman's initial AOL risk assessment. These results have informed the Ontario Health Technology Advisory Committee’s recent deliberations regarding the funding of Oncotype DX in Ontario.

PCN73 UTILISATION OF ANTIETIOPLASTIC AGENTS IN SLOVAK REPUBLIC

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OBJECTIVES: The main objective of this study was to evaluate the utilisation of antineoplastic drugs during the period of 2004-2009 in Slovak Republic. METHODS: Data involving the number of medicine packages, DDD and financial expenditures abstracted from the Slovak Institute for Drug control were analysed to evaluate the antineoplastic agents consumption. RESULTS: The obtained data showed slight increase in antineoplastic agents consumption from 2004 (1,03 DDD/1000 inhabitants/ day) to 2007 (96,94 DDD). Between 2007 and 2009 slight decrease in DDD from 96,94 DDD in 2007 to 72,10 in 2009 was observed. The observed increase is con- sumption between 2004 (9,88) and 2007 (14,13) and declined in 2009 (10,12). The consumption of alkylating agents in terms of DID was varying from 4,4 in 2004 to 3,4 in 2007 and 3,8 in 2009, cytotoxic antibiotics and related substances reached 4,14 in 2004, 2,78 in 2007 and 0,73 in 2009. The cost of antineoplastic agents consumption were quoted 2,04 in 2004 and 2,67 in 2009. Total expenditures for antineoplastic drugs multiplied from 21 736 185 € in 2004 to 105 589 161 € in 2009. Highest consumption in terms of financial units was reached in 2004 by: docetaxel (2,328 233€), paclitaxel (2,299 516€) and gemcitabine (2,062 914€).
trastuzumab (11 703 €/5), rituximab (9 135 €/6), etoposide (3,94 €/7), gemcitabine (4,17 €/8) and paclitaxel (2,08 €/9), used respectively for breast, lung, prostate, colorectal and multiple myeloma. Across all tumour types, for Germany, Italy, Spain and UK, 135 (21.4%) patients had lung cancer, 120 (19%) prostate cancer and 153 (24.3%) multiple myeloma. The incidence of SREs was 6,05 (2004), 6,42 (2005) and 6,5 (2006) per 100 patient-years in the Netherlands, Spain, and the UK respectively. The incidence of hospitalisations per patient-year was 0.92, 0.74 and 0.67 in the Netherlands, Spain, and the UK respectively. CONCLUSIONS: The burden of hospitalisations due to SREs is considerable.

PCN74
UTILISATION OF DRUGS INVOLVED IN TREATMENT OF STAGE I AND STAGE II BREAST CANCER IN SLOVAK REPUBLIC

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OBJECTIVES: Breast cancer forms in tissues of the breast, usually in ducts and lobules. It is the most common type of cancer in women in Slovakia (age-standardised rate 48 incidence rate - 2016 new cases every year, mortality rate 773 deaths annually.). The aim of this study was to provide comparable and reliable data on utilisation of stage I (invasive, up to 2 centimetres, no lymph node involved) and stage II (invasive, 2-5 centimetres, lymph node might be involved, over 5 centimetres - no lymph node involvement) breast cancer drugs within the period 2004-2009. METHODS: Analyised data were abstracted from Slovak Institute for Drug Control, which collects them from wholesalers. Data were studied in accordance with Daily Defined Dose (DDD, which takes into account of usual dosage of a medication and the average dose used). In 2004 and 2009 with anastrozole (from 138 545 to 144 788 €/5), doxorubicin (from 77 600 to 1 354 072 €/5), methotrexate (from 188 954 to 650 993 €/5) and tamoxifen (from 57 797 € to 11 703 €/5). The highest cost alternation was 108 369 € with tamoxifen (from 261 417 € to 159 064 €) and alternating trend with cyclofosfamide (206 156 €/4, 207 042 €/4, 233 867 €/4). epirubicin (238 125 €/4, 608 980 €/4, 720 757 €/5), and doxorubicin (444 627 €/4, 455 578 €/5, 639 232 €/5). The highest consumption in terms of DDD showed fluorouracil (3,44 DDD/1000 inhabitants/day in 2008), 157 040 €/4. The highest increase of DDD (4,06 DDD/4). CONCLUSIONS: Optimal treatment of breast cancer requires different therapies. Trastuzumab is well established on Slovak market due to good results in early stage treatment with few recidives. Consumption of tamoxifen and anastrozole would be influenced by exemestane.

PCN75
ECONOMIC EVALUATION OF DASATINIB IN CHRONIC MYELOGENOUS LEUKAEMIA PATIENTS RESISTANT TO IMATINIB IN PERU, COMPARED TO NILOTINIB AND HIGH DOSES OF IMATINIB

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OBJECTIVES: Within the framework of Chronic Myelogenous Leukaemia (CML) treatment in Peru, and based on a previously performed economic evaluation, we compared the costs and cost-effectiveness ratio of using 100mg/day and 140 mg/day dosages of Dasatinib with the use of 800 mg/day dosages of Nilotinib or an increased dose of Imatinib (800mg/day), for each stage of the disease, in patients who devel-

PCN76
STUDY-RELATED EVENTS IN PATIENTS WITH BONE METASTASES LEAD TO CONSIDERABLE HEALTH RESOURCE UTILISATION IN EUROPE: ANALYSIS OF A MULTINATIONAL OBSERVATIONAL STUDY

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OBJECTIVES: To determine the burden of bone metastases and health resource utilisation (HRU) associated with skeletal-related events (SREs) in patients with advanced cancer. METHODS: This observational study assessed HRU associated with SREs (defined as spinal cord compression [SCC], surgery to bone [SB], pathological fracture [PF] or radiation to bone [RB]). Patients with breast, lung, prostate cancer metastatic to bone or multiple myeloma and life expectancy >6 months were enrolled in centres in Germany, Italy, Spain, UK, Canada and USA after expe-

PCN77
THE DEVELOPMENT OF A VALUE BASED PRICING INDEX FOR NEW DRUGS IN METASTATIC COLORECTAL CANCER

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METHODS: Worldwide, prices for cancer drugs have been under downward pressure where several governments have mandated price cuts of branded products. A better alternative to mandated price cuts would be the estimation of a launch price based on drug performance, cost effectiveness and a country's ability to pay. We developed a global pricing index for new drugs that encompasses all of these attributes in patients with metastatic colorectal cancer (mCRC). METHODS: A phar- maceutical model was developed to simulate clinical outcomes in mCRC pa-

PCN78
IMPACT OF NON-ADHERENCE TO IMATINIB ON PROGRESSION-FREE SURVIVAL AS 1ST TREATMENT FOR CHRONIC MYELOID LEUKEMIA IN BRAZIL: TWO YEARS FOLLOW UP

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CONCLUSIONS: The application of this index to estimate a price based on cost effectiveness would be a good starting point for opening dialogue between the key stakeholders and a better alternative to governments’ mandated price cuts.