assuming a 60-year-old women cohort with negative-lymph node, positive estrogen receptors and negative HER2 breast cancer. Costs and effects of the treatment by identifying recurrence risk using A!O, MammaPrint or OncotypeDX were compared at 5 years, 10 years and lifetime horizons. Probability of low or high risk of recurrence by A!O was fixed 50/50 (ratios between 40/60 and 60/40 for sensitivity analysis). Risks predicted by OncotypeDX and MammaPrint were assumed to be the same. Cost of chemotherapy (2.825€), recurrence (6,357€) and other direct health care costs were derived from local data. Three health states (free of recurrence, recurrence, death) were defined in a given period of time. **RESULTS:** A total of 31% patients required adjuvant chemotherapy with MammaPrint classification (36.6% with OncotypeDX, 56.3% with A!O). MammaPrint showed a life expectancy of 23.55 years at lifetime Differences in chemotherapy costs, worse prognosis rates and a higher cost of the genomic profile (3,200€ vs. 2,675€) explained higher cumulative costs for OncotypeDX over both alternatives at any time. MammaPrint instead of OncotypeDX showed savings of at least 1,273€ after 5 years. MammaPrint resulted dominant (less costly and more effective) against OncotypeDx at any time horizon and would be cost-effective from the 6th year versus A!O (43,912€, 6,169€ and 287€ per QALY gained at 5, 10 years and lifetime; 30,000€/QALY gained threshold assumed). Sensitivity analysis confirmed base case results with MammaPrint remaining cost-effective until a willingness-to-pay threshold below 275€/QALY gained. Utility of recurrence, age at baseline and probability of A!O low risk were the key drivers at 10 years. **CONCLUSIONS:** MammaPrint in predicting risk of recurrence in these patients and avoiding chemotherapy overtreatment is a dominant strategy over OncotypeDX and it is highly cost-effective against A!O.

PCN140

EARLY-STAGE ECONOMIC EVALUATION OF STRATIFIED MEDICINE IN MULTIPLE MYELOMA

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OBJECTIVES: The clinical utility of biomarkers is often uncertain and difficult to demonstrate in an experimental setting. Modeling techniques can be used at the preclinical phase to evaluate their potential therapeutic and economic value. In multiple myeloma (MM), subgroup analyses of pivotal trials show that only patients presenting with adverse prognostic biomarkers demonstrate significantly improved survival with bortezomib-based versus some alternative therapies. A cost-utility analysis was conducted to evaluate the potential value of a risk-stratified treatment (RST) approach versus uniform treatment (UT) in Dutch daily practice MM. **METHODS:** A Markov-type decision analytic model compared total health benefits and costs for two strategies: 1) UT where all patients received the standard of care consisting of bortezomib induction/maintenance and 2) RST where treatment was stratified according to clinical and tumor biomarkers only, molecular biomarkers only, or any biomarker. In RST, high-risk patients received bortezomib while other patients received chemotherapy and thalidomide. Input data originated from clinical trials, literature reviews, observational studies and national tariffs. Various sensitivity and scenario analyses were performed. **RESULTS:** RST dominated UT, with average health gains of 0.007-0.059 LYs (0.009-0.040 QALYs) and cost-savings of €1,842-€4,924 depending on detection method. A scenario analysis for RST where all high-risk patients received an experimental treatment increased health by 0.40 LYs (0.30 QALYs) and costs by €2,567 compared to UT. Influential parameters included the price of bortezomib and survival and quality-of-life-related parameters. **CONCLUSIONS:** An economic evaluation of biomarkers in the preclinical development phase provided evidence that RST in MM may improve health outcomes and lower costs. Modeling techniques made it feasible to assess the circumstances under which RST would be promising and hence guide the prioritization of designing experimental studies to evaluate clinical utility. These findings should encourage payers and users to support the clinical development and adoption of RST approaches in MM.

PCN141

COST-UTILITY OF ACTIVE SURVEILLANCE FOR THE TREATMENT OF LOCALIZED PROSTATE CANCER IN THE CONTEXT OF THE GERMAN HEALTH CARE SYSTEM

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OBJECTIVES: There is an on-going debate about whether to perform surgery on early, localized prostate cancer and put up with common long term side effects of prostatectomy like incontinence and erectile dysfunction. Alternatively such patients could be closely monitored and counselled (active surveillance). This study investigates the cost-utility of active surveillance compared to radical prostatectomy. **METHODS:** A Markov model comparing prostatectomy and active surveillance over a lifetime horizon was programmed in TreeAge. Comparative disease specific mortality was based on the Scandinavian Prostate Cancer Group trial and a review and meta-analysis of comparative effectiveness studies. Resource use was identified via national treatment guidelines and expert interviews covering in-patient, out-patient, medication, aids & remedies as well as out of pocket payments. Utility values were literature-based and used as factor weights to age specific German HRQoL values. Uncertainty is assessed deterministically and probabilistically. **RESULTS:** Our results suggest that active surveillance is a cost saving treatment strategy generating more QALYs at reduced overall costs. The probability of developing metastases under AS and the probability of recurrence as well as utility weights of patients under AS and after prostatectomy were major drivers of cost-effectiveness. Monte Carlo simulation suggests that PE is likely to become at willingness to pay thresholds > €400,000. **CONCLUSIONS:** Active surveillance is likely to be a cost effective treatment option from the perspective of the German Statuary Health Insurance. An improved way of identifying cancers with a high probability of progression could favour active surveillance more clearly. It is not clear yet how the use of individual utilities for side effects would alter the results.

PCN142

AN OVERVIEW OF DOMESTIC CANCER DRUGS IN TURKEY: 2008-2012

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OBJECTIVES: Cancer is among the most common causes of death in Turkey. Cancer diagnosis and treatment management were substantially improved by the Ministry of Health. Generic market and price movements of different kinds of drug groups show different characteristics. In this study we aimed to demonstrate the impact of domestic manufacture of cancer drugs on import cancer drug sales in Turkey in terms of both boxes and cost sale trend analysis between 2008 and 2012. **METHODS:** This study was designed as an observational, retrospective study. Domestic oncology drugs were chosen from the base oncology drug groups. The sales data of the domestic oncology drugs and both original and generic import drugs which have the same active ingredient with the domestic drugs was obtained from the Information Medical Statistics (IMS) database from September 2007 to July 2012. Sales data is evaluated with segmented regression analysis for interrupted time series. **RESULTS:** Oncology drug sales report showed that the market share of domestic products increased approximately 38% at 2012 from 0,5% at 2008. Before the cut point, there was a statistically significant increase in the sales level of import oncology drugs, but after the cut point sales trend showed a statistically significant decrease. Import oncology drugs' unit price per box decreased from 196.5TL between September 2007 and October 2008 to 172.6TL between November 2008 and July 2012. But domestic oncology drugs' unit price per box was 91.8TL between November 2008 and July 2012. **CONCLUSIONS:** In conclusion, domestic drug manufacturing has important contributions to a country's economy including low drug prices, supplying for the domestic consumption, creation of employment opportunities and also as export potentials. Price cut in 2009 and 2011 in Turkey and "Reference Pricing System" should be taken into consideration for this price change evaluation in the case of domestic product manufacturing.

PCN143

SHORT-TERM DISABILITY (STD) ASSOCIATED WITH SKELETAL RELATED EVENTS (SRES) IN COMMERCIALLY INSURED PATIENTS WITH BONE METASTASES (BM) SECONDARY TO SOLID TUMORS

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OBJECTIVES: Patients with BM frequently experience SREs including pathological fracture, surgery or radiation to bone, or spinal cord compression .The study objective was to estimate STD (work hour loss) and associated costs in patients with SREs in a population with BM secondary to solid tumors. **METHODS:** Patients with diagnosis of solid tumors and BM were extracted from MarketScan® Health Productivity and Management Database and Commercial Database in 2002-2010. Eligible patients were 18-64 year-old full-time employees, had STD benefit eligibility, and had ≥6 months continuous pre-index enrollment (pre-period) and ≥1 month follow-up. For SRE patients, index date was the first SRE claim. For patients without SREs, index date was assigned per the distribution of index dates from SRE patients. Monthly STD hours and costs associated with STD were estimated during the first (up to) 6 months and the first (up to) 12 months. Generalized linear models estimated the marginal impact of having SRE on STD hours and associated costs, controlling for baseline STD hours and patients' characteristics. **RESULTS:** A total of 854 patients with SREs and 701 patients without SREs were included, with a mean age of 52.1 and 51.6 years, respectively. 52.2% of SRE patients reported STD during the 6-month follow-up, compared with 19.1% of patients without SREs. For SRE patients, the mean STD hours were 21.2 per month in pre-period and 61.3 during follow-up. The hours for patients without SREs were 8.6 and 14.4, respectively. Multivariate analysis indicated that SREs were associated with significantly increased STD hours (39.4 per month) and associated costs ($613 per month) during the 6-month follow-up period. Results from the 12-month follow-up period were similar. **CONCLUSIONS:** SREs were associated with significantly increased STD hours and associated costs. Therapies that prevent or delay the development of SREs may reduce work loss and costs associated with it.

PCN144

ECONOMIC ACTIVITY OF CANCER SURVIVORS IN POLAND

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OBJECTIVES: Although cancer is one of the leading causes of mortality worldwide, the number of cancer survivors is constantly growing due to improved treatment. Growing number of cancer survivors goes in line with trends to increase retirement age and this together leads to increase number of cancer survivors at economically active age. The aim of this study was to analyze economic activity of cancer survivors in Poland. **METHODS:** Data on disability (the number of medical certificates awarded because of incapacity for work) due to cancer and other diseases were retrieved from the Social Insurance Institution annual report for the year 2009. Data included the number of medical certificates issued for the first time and the number of certificates reissued, their periods of validity, age of population and disability severity (complete or partial inability to work, inability of independent existence). **RESULTS:** Cancer was the second (after cardiovascular diseases) cause of medical certificates issued for the first time because of incapacity to work and account for 22% of all certificates awarded for the first time. However, the number of certificates reissued was significantly lower – cancer accounted for 7% of all certificates reissued (cardiovascular diseases still accounted for the largest number of certificates reissued – 25%). The mean age of population with cancer was above the mean age of overall population with medical certificates awarded because of incapacity to work, however lower than those for cardiovascular or pulmonary diseases. Significant differences in disability severity structure exist. Significant higher percentage of cancer patients were judged as either incapable of independent existence (19.9%-24.9% compare to 4.4%-6.5% in overall population) or complete incapable to work (45.9%-71.1% compare to 23.4%-32.9% in overall popula-