tamofoxen from a German health service perspective. METHODS: A semi-Markov model was adapted to include the 100-month clinical trial efficacy data. Kaplan-Meier curves on time to recurrence (TTR) from the ATAC trial were fitted by survival regression including a treatment coefficient. Treatment specific progression rates were estimated in 4-year intervals, and were assumed identical based on pooled treatment arms thereafter. Survival probabilities after recurrence were identical for all treatment groups, based on German national mortality data. Published literature and physician survey data provided data on resource use and unit costs and utilities. Probabilistic analysis was carried out to obtain incremental cost-effectiveness ratios and cost-effectiveness acceptability curves. Sensitivity analyses were conducted. RESULTS: Over 25 years anastrozole patients gained 0.32 QALYs at a cost of €6,819 per patient, resulting in an ICER of €21,069 (95% CI: €46,604) per QALY gained, vs tamoxifen. With > 90% probability the ICER was below €30,000/QALY. The results were robust to plausible changes in parameters tested in sensitivity analyses, including the hazard ratio for TTR. CONCLUSIONS: This is the first cost-utility analysis of an aromatase inhibitor based on extended follow-up data. Anastrozole’s carryover treatment effect beyond therapy completion at 5 years translates into significant cost-effectiveness results against tamofoxen for PM HR+ ER+ BC women from a German national health insurance perspective.

PCN120 COST-EFFECTIVENESS OF A POPULATION-BASED COLORECTAL CANCER SCREENING PROGRAMME IN IRELAND

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OBJECTIVES: To evaluate cost-utility of colorectal cancer (CRC) screening in the Czech Republic. METHODS: A cost-utility approach was adopted, evaluating total direct costs incurred by the Czech Health System (NHS), life years gained (LYG) and quality-adjusted life years (QALY). A micro-simulation Markov model was used to estimate utilities and costs of treatment. The first course of chemotherapy was assumed as the starting-time point of the model. Simulation was terminated at the time of the patient’s death or after two years following start of the treatment. It was assumed that patients would undergo 4 cycles of chemotherapy or less if progression occurred during treatment. A treatment of progression of disease and chemotherapy would be and patients would receive palliative care until death. Transition probabilities between health states were calculated based on a systematic review of RCTs. Health state utilities were taken from published literature. Costs were taken from NHS catalogue. Probabilistic analysis was performed in order to estimate the probability that docetaxel was cost effective in Polish settings where threshold is about 91,000 polish zloty (PLN). RESULTS: Incremental costs for docetaxel versus BSC was PLN57,498 per LYG and PLN105,956 per QALY. In 2-years time horizon docetaxel was PLN135,928 less costly than perioperative (CB5) 8% 2.28 17.70/4. The probability of docetaxel cost effectiveness over BSC was 99.71% for LYG and 10.11% for QALY. The probability of the docetaxel cost effectiveness over perometry was 99.78% for LYG and 100% for QALY. CONCLUSIONS: Docetaxel seems to be cost effective in comparison with BSC and pemetrexed in the Polish setting.

PCN121 COST-EFFECTIVENESS OF A POPULATION-BASED COLORECTAL CANCER SCREENING PROGRAMME IN IRELAND

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OBJECTIVES: More than one million new cases of colorectal cancer are diagnosed worldwide annually. In Ireland, incidence rates are among the highest in western Europe, survival is lower than the European average, and mortality in men exceeds that in other western European countries. We evaluated the cost-effectiveness of a population-based colorectal cancer screening program in Ireland. METHODS: Three screening scenarios were assessed: 1) biennial guaiac-based faecal occult blood testing (gFOBT) in those aged 55–74; and 3) once-only flexible sigmoidoscopy (FSIG) at age 60. A Markov model was used to followed a cohort of 55-year-old individuals over their lifetime. Model parameters were obtained from local data, literature review and expert clinical opinion. Costs included screening and diagnostic tests, cancer treatment, complications, and surveillance of screen-detected adenomas. Health outcomes were assessed in quality-adjusted life years (QALYs). Costs and outcomes were discounted at 4% per annum. Screening scenarios were compared with the status quo (“no screening”). Probabilistic sensitivity analyses were undertaken. RESULTS: All three screening scenarios were highly cost-effective compared to no screening. In the base-case analysis, FSG had the lowest incremental cost-effectiveness ratio (ICER = 3589 per QALY gained), followed by FIT (€1,696 per QALY gained), and gFOBT (€4428 per QALY gained); gFOBT was dominated. Compared to FIT, FSG was associated with a greater health gain, and greater lifetime reductions in colorectal cancer incidence (15%) and mortality (36%). However, it was more costly than FSG, required more colonoscopies, and would result in more complications. The ICER for FIT versus FSG was €2058 per QALY gained. Results were robust to variations in parameter estimates. CONCLUSIONS: These results suggest that population-based colorectal cancer screening would be a highly cost-effective in Ireland. FIT is the optimal screening strategy since it as associated with the greatest health gain.

PCN122 COST-EFFECTIVENESS ANALYSIS OF HORMONAL THERAPIES IN PATIENTS WITH ADVANCED PROSTATE CANCER IN ITALY

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OBJECTIVES: Prostatic cancer is the second most frequent cancer and the third highest cause of cancer-related deaths in Italy. Age is the principal risk factor and given the ageing Italian population, it seems that the related health care expenditure is bound to increase, causing the need for pharmacoeconomic evaluation of therapies and their costs. METHODS: We performed a cost-effectiveness analysis using the results of a study of hormonal therapies in patients with advanced prostate cancer who underwent radical prostatectomy, from biochemical recurrence to death. Nine androgen suppression therapies were considered: orchietomy, two nonsteroidal antiandrogens (NSAA), four laterising hormone-releasing hormone (LHRH) agonists, cyproterone acetate and the maximal androgen blockade (MAB) obtained with the association of a NSAA and a LHRH. In the simulation, the androgen suppression therapies were started at PSA recurrence and continued until death. The model used the Italian NHS prospective and a patient's lifetime simulation horizon. Drug costs were calculated for each therapy, considering the less costly brand. RESULTS: All therapies produced a life expectancy (LE) of about 12 life years (LYs) with a small variability ranging from 12.3LYs for MAB to 11.37LYs for NSAA-flutamide. Quality adjusted life expectancy ranged from 9.98 QALYs for MAB to 9.28 QALYs for NSAA-flutamide. The cost per patient presented more valuable differences ranging from €12,538 for orchietomy to €59.69€ for NSAA-bicalutamide. Orchiectomy provided the most cost/effective alternative with €1100QALY. In the LHRH-agonists class leuprolupre was the most cost/effective at about €2200QALY. CONCLUSIONS: MAB was identified as the most effective and the most costly therapy. Orchiectomy was the less effective but the lowest cost and, thus, represented the most cost/effective strategy. Nonetheless, its application in actual clinical practice is difficult and it is almost always refused by patients. Among the class of LHRH-agonists, leuprolupre (22.5 mg–7.5 mg) dominated the alternatives and provided an excellent therapeutic strategy.

PCN123 LONG-TERM COST-EFFECTIVENESS OF ANASTROZOLE VERSUS TAMOXIFEN—AN UPDATED ANALYSIS BASED UPON THE 100 MONTH FOLLOW UP OF THE ANASTROZOLE OR TAMOXIFEN ALONE OR IN COMBINATION (ATAC) TRIAL

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OBJECTIVES: At a median follow-up of 100 months in the ATAC trial, anastrozole demonstrated significant improvements compared with tamoxifen in disease-free survival (HR: 0.85, p < 0.0001) and time-to-recurrence (TTR) (HR: 0.76, p < 0.0001). Absolute difference in TTR increased over time, 2.8% at 5 years and 4.8% at 9 years. Recurrence rates remained significantly lower on anastrozole after treatment completion. This study assesses the long-term cost-effectiveness of adjuvant treatment with anastrozole versus tamoxifen alone or in combination in Swedish breast cancer patients. METHODS: A Markov model was developed to integrate trial data with external data on costs and quality of life specific for Swedish breast cancer patients. The model adopts a life-long perspective and the primary outcome measure was QALYs. In the base-case model, TTR for tamoxifen and anastrozole diverge out to 10 years. Mortality risks for recurred and non-recurred patients are based upon trial data and national statistics. Resource utilization and utility estimates were based on Swedish data for patients in different stages of breast cancer. Utility weights were estimated with EQ-5D. All costs and benefits were discounted at 3% at 2003-year prices. RESULTS: In base-case, patients treated with anastrozole had a higher lifetime expected mean cost of SEK 16,000 compared to patients on tamoxifen, and gained on average 0.11 QALYs per patient. This corresponds to an incremental cost of approximately SEK 145,000 per QALY gained. CONCLUSIONS: This updated cost-effectiveness analysis of the ATAC trial is conservative, neither is any assumption made of an accrued survival benefit due to a significantly lower recurrence rate, nor does the analysis consider the potential reduction of costs associated with anastrozole patent expiry. Nevertheless, the study demonstrates that up-front anastrozole treatment for five years is a cost-effective option compared to five years tamoxifen treatment in the lifetime perspective for hormone receptor-positive patients.

PCN124 COST-UTILITY ANALYSIS OF DASATINIB IN PATIENTS WITH IMATINIb-RESISTANT CHRONIC MYELOID LEUKEMIA (CML) ON CHRONIC (CP), ACCELERATED (AP) AND BLAST (BP) PHASES IN BRAZIL

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OBJECTIVES: The Brazilian guideline for the treatment of CML is not clear whether to increase imatinib dosage or switch to dasatinib for imatinib-resistant patients. The aim of this study was to evaluate the value of dasatinib versus imatinib >400 mg for treatment of imatinib-resistant CML patients (dasatinib 100 mg vs. imatinib 600 mg for CP and dasatinib 140 mg vs. imatinib 800 mg for AP and BP), from the Brazilian Paris Abstracts