probabilistic sensitivity analysis revealed a 10% probability of PP being cost-effective over SP at a willingness-to-pay threshold of $100,000. CONCLUSION: PP is not cost-effective when compared with SP under most assumptions. The costs of CSF and hospitalization in all cycles should be accounted for in economic evaluations of CSF.

PCN55

A COST-UTILITY ANALYSIS OF FULVESTRANT IN TREATING RECURRENT METASTATIC BREAST CANCER

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OBJECTIVE: The objective of the study is to evaluate cost-effectiveness of two sequential treatments; with Fulvestrant sequence and without Fulvestrant sequence in the treatment of postmenopausal women with hormone receptor-positive local advanced or recurrent metastatic breast cancer in Korea.

METHODS: We developed a Markov model which allows assessments of the two sequential treatments to simulate the course of patients following each treatment pathway, estimating health outcomes through a long-term observation. The model was constructed with data from the literature and expert opinions. Markov health states was consisted of stable/responding, progressive, and death. The Markov cycle length is 28 days for each treatment and the cohort size is 1000 patients for each cohort. This study was analyzed from a societal perspective. All cost and outcomes were discounted at 5% and currency rate was applied to U.S. dollars. One-way sensitivity analysis and probabilistic sensitivity analysis were conducted. RESULTS: The base case results that Cohort A (with Fulvestrant) had 1.037 QALY and Cohort B (without Fulvestrant) did 0.822 QALY at year 10. The expected costs results Cohort A spent $2,704 more per patient; Cohort A $16,265 and Cohort B $13,562, respectively. The resulting ICER Per QALY was $9513 for cohort A to obtain a quality adjusted life year with respect to Cohort B in the 10-year model. The results of one-way sensitivity analysis showed stable; however, that of probability sensitivity analysis resulted from $15,796 to $16,863 with a range of QALY per person at 0.6964–0.8704 within 95% CI. CONCLUSION: Ten-year model of Cohort A in the treatment of postmenopausal women with hormone receptor-positive local advanced or recurrent metastatic breast cancer showed better clinical outcomes than Cohort B.

PCN56

NAB-PACLITAXEL OR DOCETAXEL; AS ALTERNATIVES TO CONVENTIONAL PACLITAXEL FOR THE TREATMENT OF METASTATIC BREAST CANCER (MBC): A COST UTILITY ANALYSIS IN FIVE EUROPEAN COUNTRIES

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OBJECTIVE: In patients with MBC, a common practice in Europe is to offer first line docetaxel or paclitaxel. However, one important drawback in their use is the potential for dose-limiting toxicity. An albumin-bound formulation (nab) of paclitaxel (Abraxane) was recently developed to overcome these safety drawbacks and to provide additional efficacy. To provide health economic data, a cost utility analysis comparing nab-paclitaxel to docetaxel, both as alternatives to paclitaxel was conducted for the United Kingdom (UK), France, Germany, Italy and Spain.

METHODS: The clinical data were obtained from a meta-analysis of randomized trials. Health care resource use for the delivery of chemotherapy and the management of grade III/IV toxicity was collected from a survey of European medical oncologists and from the literature. Using the Time Trade-off technique, utilities were obtained from 70 female oncology nurses in the UK and France. RESULTS: Nab-paclitaxel had the most favourable safety profile with the lowest incidence of grade III/IV neutropenia, febrile neutropenia, anemia, emesis and stomatitis. This translated to lower overall costs for managing the grade III/IV toxicity relative to both docetaxel and paclitaxel (e.g. in France; €286 vs. €966 vs. €422). Using the median number of cycles administered and the cost of toxicity in each country, the overall cost for nab-paclitaxel was higher than conventional paclitaxel, but comparable to docetaxel. Overall, 47 of 70 (67.1%) respondents selected nab-paclitaxel as their preferred choice. As an alternative to paclitaxel, the incremental cost per QALY gained was lower for nab-paclitaxel than docetaxel in three of the five countries evaluated. CONCLUSION: Given its more favorable safety profile, improved efficacy and comparable overall cost, nab-paclitaxel can be considered a preferred option over docetaxel in MBC. As an alternative to paclitaxel, each of the European health care bodies must decide if the cost per QALY gained for that country represents good value.

PCN57

COST-UTILITY ANALYSIS OF ADJUVANT GOSERELIN AND ADJUVANT CHEMOTHERAPY IN PATIENTS WITH PREMENOPAUSAL BREAST CANCER

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OBJECTIVE: To compare the cost and utility of adjuvant Goserelin and adjuvant chemotherapy for premenopausal breast cancer patients in Taiwan. METHODS: A total of 564 premenopausal breast cancer patients were newly diagnosed since 1993. Their medical history and vital status were routinely reviewed and recorded. From July 2007 to December 2007, 105 patients with stage la-IIIa disease who received Goserelin for at least one year or received at least 6 cycles of chemotherapy as adjuvant therapy were interviewed to obtain the utility value by standard gambling (SG) and visual scale (VS) methods. The chemotherapy included four regimens: CMF (cyclophosphamide, methotrexate, 5-fluorouracil), TE (docetaxel, epirubicin), TEC (docetaxel, epirubicin, cyclophosphamide), and CEF (cyclophosphamide, epirubicin, 5-fluorouracil). The cost of this study was defined as the total medical cost (surgery, drugs, and all services provided costs) of standard practices from a payer perspective. The standard practices of Goserelin and chemotherapy were subcutaneous injection of 3.6 mg Goserelin every four weeks for two years and six cycles of CMF, TE, TEC, or CEF, respectively. Survival analysis was conducted by Kaplan-Meier method and weighted by utility measurements. RESULTS: Survival at 11 years derived from registry data for patients received Goserelin was better than patients received chemotherapy (100% vs. 75%). Combining the survival data with utility score from questionnaires, the utility-weighted life-years were higher in Goserelin group compared to chemotherapy group by SG and VS 8.81 vs. 6.83, 8.78 vs. 7.14, respectively. The cost of Goserelin was lower than that of chemotherapy and ranged from NT$29,825 to 30,234 (US$918–1,545) when applying standard body surface of 1.5 m² and 1.8 m² about the calculation of chemotherapy doses. CONCLUSION: Our data suggest the Goserelin had better survival, higher utility-weighted life-years, but less cost than chemotherapy in the adjuvant treatment of premenopausal patients with stage la-IIIa breast cancer in Taiwan.