

avoided compared with 6-day filgrastim for NHL patients treated with CHOP-14, and <€7000 for BC patients treated with TAC. Pegfilgrastim dominated 11-day filgrastim.

PCN69

COST-EFFECTIVENESS ANALYSIS OF DASATINIB 100 MG VS. IMATINIB 800 MG IN PATIENTS WITH IMATINIB-RESISTANT CHRONIC MYELOID LEUKEMIA IN SPAIN

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OBJECTIVES: To assess the cost-effectiveness relationship of dasatinib in comparison to high dose of imatinib in the treatment of CML in patients with imatinib-resistant chronic myeloid leukemia in Spain. **METHODS:** A Markov model was developed to estimate, in the long term, the costs and clinical outcomes (life-years gained and quality-adjusted life-years gained) of dasatinib compared to imatinib in imatinib-resistant patients. Four health states were considered in the analysis: Chronic phase; Accelerated phase; Blast phase; and Death. Cycle length is on a monthly basis and health effects and costs were counted until all patients reached the "death" health state. The efficacy outcomes are estimated from a direct comparison derived from the clinical trial BMS 017. The health-care resource use has been set up by a Spanish clinical expert and direct costs are in euros (2009). The perspective used is the Spanish Health System. Both costs and effects were discounted annually at 3.5%. The robustness of the results was tested in deterministic sensitivity analyses. **RESULTS:** In the base-case scenario, treatment with dasatinib proves to be a dominant option with a lower total cost and a higher level of effectiveness (potential cost saving of €56,995 and 0.19 QALY gained). The sensitivity analysis indicates that dasatinib remains as a dominant alternative in front of changes in the most relevant variables: costs, utility values, age at the start of the treatment, time horizon, and discount rate. **CONCLUSIONS:** Compared to imatinib, dasatinib shows a slower disease progression with relatively lower direct medical costs. Dasatinib can be regarded as a dominant treatment option in patients with imatinib-resistant CML in the Spanish Health System.

PCN70

COST-EFFECTIVENESS ANALYSIS OF RITUXIMAB THERAPY IN PATIENTS WITH PREVIOUSLY UNTREATED CHRONIC LYMPHOCYTIC LEUKEMIA (CLL) IN BRAZIL

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BACKGROUND: Chronic lymphocytic leukemia (CLL) is the most common of adult leukemias, comprising about 30–40% of all cases (Watson 2008). Incidence of CLL varies worldwide, being 4.3/100,000 in Caucasian men and increases with age, with median age at diagnosis of 64–70 years (Yamamoto 2005). In a phase III trial (CLL-8), the combined immunochemotherapy R-FC (rituximab plus fludarabine and cyclophosphamide) showed longer progression-free and overall survival, higher complete response rate, and longer duration of response than FC alone in previously untreated CLL patients. **OBJECTIVES:** To assess the incremental cost-utility ratio for R-FC versus FC alone in untreated CLL patients under the public payer perspective in Brazil. **METHODS:** The cost-effectiveness analysis was based on the pivotal study ML17102 (CLL-8), a Markov model was developed consisting of three health states: "Progression-Free Survival" (PFS), "Progression," and "Death". The model cycle length is monthly and the time horizon of the analysis is 15 years. Costing was based on public sources. Only direct costs were considered in the calculation, including costs for treating severe adverse events and further treatment patterns. Costs were reported in 2010 (US\$1.00–\$Brz1.8) Brazilian Reals and discounted at a 5% rate according to local guidelines for economic evaluation (Vianna 2007). **RESULTS:** R-FC combined therapy resulted in a gain of 1.031 life-years (Lys) (5.611 vs. 4.579) at an incremental cost of \$Brz44,780. The ICER of R-FC versus FC is, therefore, estimated to be \$Brz43,414 per LY gained. The probability of R-FC being cost-effective is 98.84%, considering a willingness-to-pay of R\$100,000. **CONCLUSIONS:** In untreated CLL patients, R-FC therapy improves overall survival and progression-free survival compared with FC alone. Results suggest that R-FC combined therapy is a cost-effective intervention for the Brazilian Public Healthcare System.

PCN71

A COMPARISON OF THE COST-EFFECTIVENESS OF ZOLEDRONIC ACID FOR PREVENTING SKELETAL-RELATED EVENTS IN PATIENTS WITH BONE METASTASES FROM PROSTATE CANCER IN 4 EUROPEAN COUNTRIES

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OBJECTIVES: Zoledronic acid (ZOL) is the only bisphosphonate indicated for preventing skeletal-related events (SREs) in patients with bone metastases from prostate cancer (PC). We estimated and compared the cost-effectiveness of ZOL versus placebo for this indication in France, Germany, Portugal, and the The Netherlands. **METHODS:** Incremental costs and quality-adjusted life-years (QALYs) associated with ZOL and placebo were estimated using a literature-based decision analytic model using data from a 15-month randomized trial comparing ZOL (4 mg monthly; n = 214) with placebo (n = 208). The model included assumptions about SREs, mortality, drug and administration

costs, SRE costs, quality of life, and therapy duration. SRE costs were estimated using Diagnosis Related Group tariff information (supplemented with published literature) in France and Germany, and published retrospective medical record review cost analyses in Portugal and the The Netherlands. **RESULTS:** Over 15 months, the cumulative projected SREs were 0.83 for ZOL and 1.66 for placebo. ZOL reduced SRE costs by €2659 to €4005, depending on the country. SRE cost savings were greatest in the The Netherlands, followed by Portugal, Germany, and France. ZOL reduced total costs (including drug costs) by €62 in Portugal and €301 in the The Netherlands, but increased costs by €562 in Germany and €1022 in France versus placebo. ZOL increased quality-adjusted survival by 0.03566 QALY per patient, with an incremental cost per QALY gained versus placebo of €15,770 in Germany and €28,648 in France. In all countries, the cost-effectiveness ratio for ZOL was favorable and substantially below the internationally accepted €50,000/QALY threshold. Costs and QALYs were saved with ZOL in Portugal and the The Netherlands. **CONCLUSIONS:** In patients with bone metastasis from PC, ZOL is economically attractive. The cost-effectiveness ratio for ZOL is below standard cost-effectiveness thresholds used by most health-care systems. In Portugal and the The Netherlands, ZOL is cost-saving versus placebo.

PCN72

COST-EFFECTIVENESS OF LETROZOLE AND OF ANASTROZOLE VERSUS TAMOXIFEN AS ADJUVANT THERAPY IN POSTMENOPAUSAL WOMEN WITH EARLY BREAST CANCER USING UPDATED SURVIVAL DATA FROM THE BIG 1–98 AND ATAC TRIALS: A UK PERSPECTIVE

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OBJECTIVES: The 74-month follow-up of the BIG 1–98 trial reported improved overall survival (OS) for 5 years letrozole (LET) versus tamoxifen (TAM; hazard ratio 0.83; 95% CI 0.71, 0.97; $P < 0.05$). The 100-month follow-up of the ATAC trial did not show a significant difference in OS for anastrozole (ANA) versus TAM. Using reported differences in OS, we estimated the incremental cost per quality-adjusted life-year (QALY) gained for 5 years LET or ANA versus 5 years TAM in postmenopausal women with endocrine-responsive breast cancer (ERBC), from a UK NHS perspective. **METHODS:** Annual survival probabilities postoperatively were extracted from BIG 1–98 and ATAC results. Survival was extrapolated to 20 years using data reported by the EBCTG for women receiving 5 years TAM. Conservatively, equivalent annual survival probabilities were assumed for TAM, LET, and ANA groups after follow-up. Published adverse event (AE) costs and 5-year costs for locoregional recurrence (LR) and metastases were applied. Published utility weights for disease-free survival with AEs, LR, and metastases were used. All costs and health benefits were discounted at 3.5% annually. **RESULTS:** Over a 20-year period, the discounted additional treatment costs are £3618 for LET and £3736 for ANA. When accounting for AEs and reduced BC recurrence, the total cost difference between LET and TAM is £2964, and between ANA and TAM is £2929. The model estimated a difference in discounted QALYs of 0.297 for LET versus TAM, with an incremental cost per QALY gained of £9999. The incremental cost per QALY gained for ANA versus TAM is £46,829. **CONCLUSIONS:** Using updated OS data, economic analysis of 5 years LET or ANA versus 5 years TAM in postmenopausal women with ERBC suggests that LET is substantially more cost-effective than ANA. The current analysis is consistent with earlier extrapolations based on differences in time to recurrence.

PCN73

COST-EFFECTIVENESS ANALYSIS OF SUPERIOR HYPOGASTRIC PLEXUS INHIBITION IN CANCER PATIENTS WITH VISCERAL PAIN IN LOWER ABDOMEN

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OBJECTIVES: The aim of a neurolytic sympathetic blockade is to reduce consumption or the side effects of opioids, to improve and enhance the analgesic response, and get efficiency of costs related to treatment. We assessed the cost-effectiveness (CEA) of superior hypogastric plexus inhibition (SHPI) in patients with cancer and visceral pain in the lower abdomen. **METHODS:** We conducted a CEA within a retrospective follow-up clinical study at the National Cancer Institute in Mexico City in patients >18 years with cancer and visceral pain. We assessed patients that underwent SHPI between March 2005 and June 2009. We evaluated the visual analog pain scale (VAS), drugs resource consumption, and medical direct costs. The measures were evaluated before and after (1 day, 1 week, 1, 2, 3, and 6 months) the procedure. Incremental cost-effectiveness ratio (ICER) was calculated. **RESULTS:** Twenty-six patients underwent SHPI. They were matched with 26 patients with cancer and visceral pain managed with standard treatment (WHO analgesic ladder steps). The average cost per patient was not significantly different between treatment groups (\$732 vs. \$6768 MXP, $P = 0.54$); however, the effectiveness (treatment success: 50% decrease in drug consumption within 30 days) was much higher for SHPI (65% vs. 19%, $P < 0.001$). The ICER was \$1308 (IC 95% 1104–1485) MXP per patient. **CONCLUSIONS:** SHPI was effective for treating visceral pain in cancer patients. The ICER (\$1313 MXP) shows that SHPI is a cost-effectiveness alternative in Mexico (threshold of 1 GDP per capita).