

cost-effectiveness ratio (ICER) was €2059 in the base case, varying from €1474 to €4963 according to the multi-ways sensitivity analysis. **CONCLUSIONS:** The economic assessment shows that TAC is cost-effective in the management of early breast cancer in France with an ICER below the threshold commonly cited in such analyses.

PCN13

COST-EFFECTIVENESS OF HEPATIC ARTERY INFUSION FOR METASTATIC COLORECTAL CANCER (CALGB 9481)

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OBJECTIVES: CALGB conducted a randomized trial to compare the survival duration, quality of life, and costs of hepatic artery infusion (HAI) versus systemic chemotherapy (SYS) as initial treatment for patients with colorectal cancer metastatic to the liver. We evaluated the lifetime incremental cost and benefit from a third-party payer perspective alongside that trial. **METHODS:** Resource use data were collected for all study patients through 18 months, regardless of disease progression, and a subset was followed until death. Unit costs were derived from itemized patient bills, adjusted using department-specific ratios of costs to charges. Utility weights were collected serially from trial patients and used to calculate quality-adjusted survival. **RESULTS:** During the first 18 months, inpatient stays accounted for the highest proportion of overall costs (47%) in the HAI arm, while outpatient visits were the major component of costs (40%) in the SYS arm. In both arms, non-protocol chemotherapy treatment given after progression accounted for approximately half of all outpatient care costs. Compared to systemic 5-fluorouracil and leucovorin, hepatic artery infusion of floxuridine increased quality-adjusted survival by 0.46 quality-adjusted life years, at an incremental cost of \$50,867. Most of the difference in costs occurred early, and was attributable to higher inpatient care and surgery costs. The incremental cost-effectiveness ratio (ICER) was \$112,924 per quality-adjusted life year. The bootstrap-derived distribution of ICER was quite precise, with only 28% and 90% of simulations falling under \$100,000/QALY and \$200,000/QALY, respectively. The magnitude of the ICER was robust in sensitivity analyses. **CONCLUSIONS:** Hepatic artery infusion for metastatic colorectal cancer resulted in a substantial increase in quality-adjusted survival at an ICER that compares favorably with other widely used cancer treatments in the United States. These results create a benchmark against which the costs and cost-effectiveness of new agents can and should be evaluated.

PCN14

COST-EFFECTIVENESS ANALYSIS OF ARANESP® (DARBEPOETIN ALFA) ADMINISTERED ONCE EVERY THREE WEEKS COMPARED TO ONCE EVERY WEEK

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OBJECTIVE: Anemia, a common complication of chemotherapy, is often treated with erythropoiesis-stimulating proteins. The objective of this study was to assess the cost-effectiveness of once every three weeks (Q3W) 500 µg Aranesp® (darbepoetin alfa) administration compared to a weekly 150 µg (QW) regimen from a French societal perspective. **METHOD:** A decision-tree model with a 16-week time horizon was developed in Excel®.

This model included the possibility to adapt darbepoetin alfa dosing based on hemoglobin (Hb) criteria reported in guidelines. The transition probabilities, the number of days with Hb ≥ 11 g/dL (effectiveness measure), and the units of blood transfused were extracted from a randomized clinical trial. Unit costs were applied to medical resources used (transfusions, darbepoetin alfa, physician visits, hospitalizations, and administration time by health care professionals) and patients' time. Literature data, validated by two French clinical experts, was used for inputs regarding resource use. Time was valued at gross hourly wage rate. Both time and medical costs were extracted from official sources (AMELI; INSEE) and adjusted to 2005 values. A 5000-replication probabilistic sensitivity analysis was performed with @RISK® using distributions for both probabilities and time. **RESULTS:** The effectiveness was similar between the two arms. Switching patients from QW to Q3W resulted in a gain of 2.3 days with Hb ≥ 11 g/dL (95% CI: -3.3; 7.6). Total costs were slightly lower for Q3W (€4616 [95% CI: 4303; 4959]) compared to QW (€4856 [95% CI: €4488; 5258]). Probabilistic sensitivity analysis revealed 68% of replications with higher effectiveness and lower costs for Q3W treatment (dominant); 11% with both higher effectiveness and costs; 4% where Q3W was dominated by QW and 17% showed both lower effectiveness and costs. **CONCLUSION:** This analysis provides probabilistic information to decision makers about the health economic impact of darbepoetin alfa Q3W. A decision in favor of Q3W is more likely to be beneficial from a health economic viewpoint.

PCN15

PHARMACOECONOMIC ANALYSIS OF EXEMESTANE VERSUS TAMOXIFEN AS ADJUVANT THERAPY FOR PATIENTS WITH EARLY-STAGE ESTROGEN RECEPTOR-POSITIVE BREAST CANCER

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OBJECTIVE: To estimate the cost-effectiveness of adjuvant treatment with exemestane vs. tamoxifen for early-stage breast cancer after 2–3 years treatment with tamoxifen, in Spain. **METHODS:** A Markov state-transition model was performed from the National Health System perspective, and simulates the long-term outcomes over 10 and 20 years. The primary outcome was the incremental cost-effectiveness of exemestane scheme in terms of cost per quality-adjusted life year (QALY) gained. The transition probabilities between health states (disease-free survival with or without complications, local recurrence, contralateral breast cancer, systemic recurrence or dead) were derived from the Intergroup Exemestane Study (IES) trial and from secondary Spanish sources. The costs associated with chemotherapy and complications (bone fractures, vaginal bleeding, venous thromboembolism, myocardial infarction) and unit costs (€2005) were obtained from Spanish treatment guidelines and Spanish health costs databases. A literature review was conducted to derive the utility data. **RESULTS:** The average additional QALY per exemestane-treated patients were 0.200 and 0.557, for 10 and 20 years, respectively, compared with that of tamoxifen alone scheme. The additional cost per QALY gained obtained with exemestane was €70,990 and €39,170, respectively. The sensitivity analyses confirmed the robustness of the base case analysis. **CONCLUSIONS:** According to this model, adjuvant exemestane therapy after 2–3 years of tamoxifen therapy significantly improved disease-free survival as compared