analysis, sunitinib has a 45.9% and a 64.9% probability of being cost-effective compared with IFN-α at the threshold of $50,000 and $100,000/QALY, respectively. Survival, sunitinib drug costs and cost of best supportive care were the key drivers of the model. CONCLUSION: Sunitinib is a cost-effective alternative to IFN-α as first-line treatment in mRCC, with cost-effectiveness ratios within the established threshold that society is willing to pay for health benefits (i.e. $50,000–100,000/LY or QALY).

PCN19
A COST-CONSEQUENCE ANALYSIS OF DARBEPOETIN ALFA ADMINISTERED EVERY 3 WEEKS (Q3W_DA) COMPARED TO WEEKLY EPOETIN ALFA (QW_EA) OR EPOETIN Beta (QW_EB) IN PATIENTS WITH CHEMOTHERAPY-INDUCED ANEMIA (CIA): THE GERMAN CASE
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OBJECTIVE: Chemotherapy-induced anemia (CIA) is often treated with erythropoiesis-stimulating agents (ESAs). This study assessed the cost consequence of Q3W_DA administration (500 μg) compared to QW_EA or QW_EB from a German societal perspective. METHOD: A decision-tree model was developed in MSExcel based on the results of a European retrospective observational study that included data from 786 patients with non-myeloid malignancy and CIA over a 16-week period. Transition probabilities, average hemoglobin (Hb) value over treatment period, number of blood transfusions, drug administrations, transfusion, response to treatment and ESA administration settings were used. Unit costs were applied to medical resources used and to patients’ time, further specified by a panel of 11 German clinical experts. Time was valued at gross hourly wage rate. Both time and medical costs were extracted from official sources (EBM) and adjusted to 2006€. A 5000-replications probabilistic sensitivity analysis was performed with @RISK® using distributions for probabilities (binomial), medical resources used (normal), time (normal) and outcome measures (normal). RESULTS: The difference in hemoglobin between treatments was: Q3W_DA minus QW_EA, 0.13 g/dL (95%CI:−0.151, 0.420) and Q3W_DA minus QW_EB, 0.19 g/dL (95%CI:−0.0168, 0.393). Q3W_DA resulted in comparable mean Hb-change over time to QW_EA and QW_EB. Lower costs were observed for Q3W_DA: −197€ [95%CI:−972, 572] vs. QW_EA and −203€ [95%CI:−272, 294] vs. QW_EB. Sensitivity analysis for Q3W_DA revealed 56% of the replications vs. QW EA and 75% vs. QW EB with better Hb values and lower costs (dominant); 25% vs. QW EA and 21% vs. QW EB with higher costs and better Hb values. CONCLUSIONS: This analysis had a low life information showed that treatment of CIA with Q_3W DA was effective and less costly than QW_EA and QW_EB. A decision in favor of Q3W_DA has the highest probability to be beneficial from the German societal perspective.

PCN20
COST-EFFECTIVENESS OF CETUXIMAB (ERBITUX®) IN COMBINATION WITH RADIOTHERAPY VERSUS RADIOTHERAPY ALONE IN THE TREATMENT OF LOCALLY ADVANCED HEAD AND NECK CANCER IN THE UNITED KINGDOM
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OBJECTIVES: To estimate the cost-effectiveness of cetuximab in combination with radiotherapy (ERT) compared to radiotherapy alone (RT), for the treatment of locally advanced head and neck cancer in patients for whom chemoradiotherapy is inappropriate or intolerable in the UK. METHODS: A modelled economic evaluation calculated the incremental cost per quality-adjusted life year (QALYs) gained with ERT compared to RT. Resource utilisation and survival data were extracted from an international phase-III trial of ERT. Assumptions regarding costs of care were drawn from estimates by an expert clinical panel. Overall survival and progression-free survival times were extrapolated beyond the trial period using statistical models. Patient survival was stratified into health states defined by adverse event status in the acute phase and disease status post-treatment. Utility values for the health states were obtained from a survey of oncology nurses using the EQ-5D. Estimates of individual costs and outcomes were estimated for each patient in the trial and overall mean values calculated for the incremental analysis between the treatment groups. The analysis was conducted from the perspective of the NHS. Costs and outcomes were discounted at 3.5%. RESULTS: In the lifetime analysis, ERT patients were estimated to gain an extra 1.26 QALYs compared to RT patients. From the public establishment perspective, this translated into an incremental cost per QALY gained of €5,390. Shortening the analysis to the timeframe of the clinical trial (5 years) raised the ICERs to €19,951 per QALY gained respectively. Bootstrap simulation and sensitivity analysis showed that the ICERs were robust to changes in the key variables. CONCLUSION: Results of the modelled economic evaluation strongly suggest that ERT offers a good value-for-money alternative in the treatment of locally advanced head and neck cancer in the UK.

PCN21
A HEALTH ECONOMIC EVALUATION OF HEXVIX AS ADJUNCT TO STANDARD WHITE LIGHT CYSTOSCOPY IN THE MANAGEMENT OF SUPERFICIAL BLADDER CANCER
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OBJECTIVES: Bladder cancer is the fifth leading type of cancer diagnosed in Belgium. Early detection is key in improving survival. Hexvix, by inducing tumor fluorescence during cystoscopy, improves lesion detection, delineation and therefore also lesion ressection. The cost-effectiveness of adding Hexvix to standard white light cystoscopy in the diagnosis and management of non-muscle invasive bladder cancer was assessed from the Belgian health care payers’ perspective. METHODS: A Markov model with a 10 year time horizon, describing management patterns and resulting outcomes in patients with suspected bladder cancer, was developed in Excel. Treatment patterns and clinical evolution of high (HR), medium (MR) and low (LR) risk patients were derived from European treatment guidelines and further validated by a panel of 3 Belgian urologists. By using Hexvix in diagnostic cystoscopies bladder cancer could potentially be detected at an earlier stage (4% HR diagnosed in MR and 4% MR in LR) and resection could be more complete resulting in lower recurrence rates (HR: −50%; MR: −40% and LR: −30%; based on data obtained with an unlicensed, less readily taken up fluorescent molecule). Official tariffs were applied to medical resources identified. An annual discount rate of 3% for future cost and 1.5% for effects was applied. Results were expressed as cost per life year gained (LYG). RESULTS: Using this model, compared to standard white light cystoscopy adding Hexvix, in diagnostic and therapeutic cystoscopies, increased survival per patient could be 0.09 years at an incre-
mental cost of €496, resulting in an incremental cost-effectiveness ratio of €5470/LYG. LYG and incremental costs were respectively most sensitive to time-horizon and the effect of Hexvix on recurrence rate (€3,251/LYG to €25,549/LYG). CONCLUSION: Compared to standard white light cystoscopy alone, in this hypothetical model adding Hexvix to this procedure appears to be cost-effective in Belgium from the health care payer’s perspective.

PCN22

COST-EFFECTIVENESS OF SUNITINIB AS SECOND LINE TREATMENT IN PATIENTS WITH METASTATIC RENAL CANCER IN BELGIUM
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OBJECTIVES: To determine the cost-effectiveness of sunitinib malate versus best supportive care (BSC) after failure of cytokine immunotherapy from the perspective of the Belgian public payers (INAMI/RIZIV). METHODS: A Markov model was constructed to simulate disease progression after failure on first-line cytokine therapy. Patients entered the model receiving sunitinib plus BSC or BSC alone. The model had 3 disease states (progression-free survival, tumor progression and move to BSC, and death) and used monthly cycles. Outcomes in the model were valued in terms of progression-free life years (PFLYs) and life years (LYs) gained. The cost-effectiveness measures were cost per PFLY and cost per LY saved. The effectiveness parameters for sunitinib were taken from a phase II clinical trial (RTKC-0511-014). To estimate survival for patients receiving palliative/supportive care, data from a SEER-Medicare analysis and a study of previously-treated patients with mRCC who were candidates for second-line therapy (Motzer et al., 2004) were combined. Medical costs in 2006 prices were considered from the perspective of the RIZIV/INAMI. Resource utilization was based on expert opinion from a modified Delphi panel consisting of seven Belgian physicians specialized in mRCC. Utilities were derived from published literature. The model incorporates the expensive cost of the terminal stage (last 4 weeks of life). Future costs were discounted at 3% and effects at 1.5% in line with the Belgian pharmacoeconomic guidelines. The time horizon was lifetime (10 years).

RESULTS: Treatment with sunitinib was associated with an average gain of 5.13 PFLYs and 1.11 LYS per patient. The incremental cost-effectiveness ratio of sunitinib versus BSC was €7,665 per PFLY and €35,389 per LY gained. CONCLUSION: Given the assumptions and limitations of this model, if the value of a life year gained for cytokine-refractory mRCC patients is at least €35,389 sunitinib should be considered a cost-effective therapy.

PCN24

COST-EFFECTIVENESS ANALYSIS OF SHT3 RECEPTOR ANTAGONISTS FOR PREVENTION OF CHEMOTHERAPY INDUCED NAUSEA AND VOMITING
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OBJECTIVES: To study the incremental cost-effectiveness of two SHT3 receptor antagonists-granisetron (GR) against ondansetron (ON)- in prevention treatment of Chemotherapy induced nausea and vomiting (CINV). METHODS: Prospective, multi-center, observational study on 325 naïve patients recruited at 8 Spanish Oncology Services. Consecutive patients undergoing 1st cycle with moderate to highly emetogenic chemotherapy, and scheduled antiemetic treatment based on GR or ON were enrolled. After chemotherapy (day 0), daily maximum nausea intensity and number of vomiting episodes were self-recorded during 5 more days in a diary card. Acute CINV was defined as developed in day 0, and delayed CINV as developed or persisting in days 1–5. Antiemetic “full” response was defined as: no emesis and no/mild nausea. Differences between GR and ON in adverse event costs, emergency visits, or other concomitant treatments were negligible. Only antiemetic drug direct costs were considered. Incremental Cost-Effectiveness Ratio (ICER) was computed for 1,000 and 10,000 bootstrap samples. Mean ICER values, bootstrap percentiles and cost-effectiveness scatterplots were used for comparison. RESULTS: No differences were found in acute treatment effectiveness (GR = 78.7%, ON = 79%) making impossible to interpret ICER values. Direct mean cost was somewhat higher for GR = 36.9€ (SD = 35.3) than for ON = 34.1€ (SD = 34.2). Delayed effectiveness was higher in GR (51.8%) than in ON (42.7%) arm, with lower mean (90%)IC costs in GR = 19.5€ (16.57, 22.6) than in ON = 55.26€ (46.4, 64.2) group. Bootstrap ICER mean value was 353.1 (P10 = 1120.8, P90 = 85.7). Scatterplots in the cost-effectiveness space showed

PCN23

PRIMARY PROPHYLAXIS AGAINST FEBRILE NEUTROPENIA WITH PEGFILGRASTIM IS COST-EFFECTIVE COMPARED WITH FILGRASTIM IN NON-HODGKIN’S LYMPHOMA PATIENTS RECEIVING CHOP-21 IN ITALY
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OBJECTIVES: Primary prophylaxis with granulocyte-colony stimulating factors, used in the first and subsequent cycles of chemotherapy, is recommended by the 2006 ASCO and EORTC guidelines when the overall risk of febrile neutropenia (FN) is ≥20%. We evaluated the cost-effectiveness of pegfilgrastim versus filgrastim used for 11 days (as used in clinical trials) and 6 days (often used in clinical practice) in patients with aggressive non-Hodgkin’s lymphoma (NHL) receiving CHOP-21 chemotherapy in Italy. METHODS: A decision-analytic model was constructed from a health care payer’s perspective with a lifetime model horizon. Costs (2006 value) including drugs, drug administration, FN-related hospitalisations, and subsequent medical costs were acquired from official price lists or literature. FN risk, FN case-fatality, relative dose intensity (RDI), and impact of RDI on survival were based on data from a comprehensive literature review and expert panel validation. Using data from a meta-analysis and several observational studies, we estimated that the absolute risk of FN in patients receiving pegfilgrastim decreased from 19.6% to 13.1% (6.5 percentage points) versus 11-day filgrastim, and from 25.1% to 13.1% (12 percentage points) versus 6-day filgrastim. NHL mortality and all-cause mortality were from literature. Sensitivity analyses were performed on key parameters. RESULTS: Pegfilgrastim was cost saving compared with 11-day filgrastim (€5053 versus €7465). Compared with 6-day filgrastim, the incremental cost-effectiveness ratio (ICER) was €475 per FN event avoided or €5 per 1% decrease in absolute risk of FN. Pegfilgrastim achieved 0.112 more discounted life-years (LY) at a minimal cost increase (€5053 versus €4996€) per person, yielding an ICER of €513/LY gained. Results were most sensitive to the relative risk of FN for filgrastim versus pegfilgrastim. CONCLUSION: In Italy, pegfilgrastim was cost saving compared with 11-day filgrastim and appeared to be cost-effective compared with filgrastim used for 6 days per cycle of CHOP-21.