to the LAC arm who were converted to open colectomy were included in the LAC group in the analysis. RESULTS: Among 855 patients, length of stay (mean: 5.5 vs. 6.7 days) was significantly shorter, while operating time was significantly longer (mean: 166 vs. 109 minutes) in the LAC arm. More costly OR supplies were used in the LAC arm. Resource use was otherwise similar between arms. The incremental costs were either modestly higher in the LAC arm, $2,454 (95% CI $1,421–$3,485, 2007 US $) (C), or not statistically different, $–62 (95% CI $–1,759–$1,608) (A) depending on the source of unit costs. CONCLUSIONS: Economically, the choice between LAC and OC consists of a tradeoff between higher operative costs and shorter length of stay. The direction and magnitude of the net effect depends on the cost inputs from a given institution, with LAC relatively less expensive in institutions with higher "hotel" costs and less costly operative supplies. Future research should focus on structured peri- and post-operative care to further optimize the care and costs associated with LAC.

PCN46 COST-MINIMIZATION ANALYSIS OF CAPECITABINE VERSUS UFT/LEUCOVORIN FOR THE TREATMENT OF METASTATIC COLORECTAL CANCER (MCRC) IN BRAZIL
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OBJECTIVES: Capecitabine (Xeloda) is an effective alternative to treat metastatic colorectal cancer (mCRC) patients. This study compares the costs of capcitabine and UFT/Leucovorin (UFT/LV) in first line therapy for patients with mCRC in Brazil. METHODS: An analytic-decision model for projecting costs of treating mCRC in Brazil was developed considering local guidelines, to compare costs of capcitabine (2500 mg/m2/day, d1-d14; 21 days-cycle) and UFT/LV (300 mg/m2/day of UFT, d1-d28; 35 days-cycle; 70 mg of LV per day), under the payer perspective. The time horizon of this analysis was 3.5-months, based on the progression free survival (PFS) of UFT/LV showed in Douillard, et al 2002 trial. In the absence of head-to-head trials, the same efficacy, in terms of PFS, was assumed for capcitabine and UFT/LV. The safety profiles were obtained from Twelves, et al 2001 and Douillard, et al 2002. A panel of Brazilian specialists was conducted to identify the local practices for treating adverse events (AE). Costing was conducted based on public lists. For the base case scenario a 1.7 m2 body surface patient was considered. One-way sensitivity analysis was conducted to check the robustness of the results. RESULTS: The total treatment cost of capcitabine is lower than UFT/LV: R$11,908 for capcitabine vs R$19,417 for UFT/LV. Capecitabine has a lower acquisition cost than UFT/LV: R$11,908 for capcitabine vs R$196 for CAP vs. R$1,089 for UFT/LV). CONCLUSIONS: Findings suggest capcitabine as a cost-saving therapy under the payers’ perspective in Brazil. Total savings could reach R$7,509 for a 3.5 month-period treatment.

PCN47 ECONOMIC EVALUATION IN THE POSTOPERATIVE MANAGEMENT OF COLORECTAL CANCER PATIENTS IN GREECE
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OBJECTIVES: An economic analysis was undertaken alongside a trial evaluating chemotherapy with FOLFOX6: (5Fluouracil/Leucovorin/Oxaliplatin) versus XELOX: (Capcitabine/Oxaliplatin) as an adjuvant postoperative therapy for high risk colorectal cancer patients. METHODS: In the absence of survival difference, a cost-minimisation analysis was undertaken. Individual patient data (n = 169) were combined with 2008 unit prices to estimate the cost of chemotherapy, administration, medical consumables, drugs and laboratory testing. Patient addresses were used to estimate travelling expenditure and income data to evaluate productivity losses for those at productive ages. Raw data were bootstrapped 5000 times to correct for distortions and to undertake statistical testing. RESULTS: From a hospital perspective, the mean patient chemotherapy cost was €8,866 with FOLFOX6 and €9,723 with XELOX. Administration cost was €5,212 and €1,051, erythropoietin €2,787 and €1,744 and total treatment cost €17,485 and €12,524 respectively. Thus, XELOX reduced overall treatment cost by €4,961 (p ≤ 0.01). From a social insurance perspective, the mean chemotherapy cost was €9,265 with FOLFOX6 and €10,160 with XELOX. Administration cost was €3,113 and €185, erythropoietin €2,789 and €1,713 and total treatment cost €15,797 and €12,116 respectively. Thus, XELOX reduced total treatment cost by €3,680 (p ≤ 0.01). Mean patient travelling cost was €184 with FOLFOX6 and €80 with XELOX, a difference of €104 (p ≤ 0.01). Mean productivity loss was €100 with FOLFOX6 and €31 with XELOX, a difference of €69 (p ≤ 0.01). CONCLUSIONS: Apart from being more convenient for patients, oral chemotherapy with Capecitabine(Xeloda) reduces total treatment cost for the NHS and Insurance Funds, as it reduces drastically the cost of administration. It also reduces patient travelling time and cost and productivity loss. Hence, it represents a cost saving and advantageous approach to the management of operated colorectal cancer patients.

PCN48 COST-MINIMIZATION ANALYSIS OF XELOX VERSUS FOLFOX-6 IN THE FIRST LINE TREATMENT OF METASTATIC COLORECTAL CANCER IN BRAZIL
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OBJECTIVES: A cost-minisation analysis compared total costs of XELOX (capcitabine + oxaliplatin) versus FOLFOX-6 (5-FU + folic acid + oxaliplatin) in the first line treatment for patients with metastatic colorectal cancer (mCRC) in Brazil. METHODS: An analytic-decision model for projecting costs of treating mCRC in Brazil was developed considering local guidelines and the Brazilian payers’ perspective. According to the phase III trial of Duerieux et al 2007, we assumed the same efficacy for XELOX and FOLFOX-6 in terms of progression free-survival and overall survival. Only direct costs (drugs, IV administration, physician fees, materials, etc.) were considered for the chemotherapy and for treating adverse events. The time horizon of this analysis was 126 days according to the mean number of Progression Free Survival found in the Duerieux clinical trial (6 cycles of XELOX and 9 cycles of FOLFOX-6). For the base case a patient with 1.7 m2 was considered. A Delphi panel was conducted to identify local practices to manage the adverse events of each scheme. Discount rate was not necessary because of the short length of the analysis. RESULTS: Drug acquisition costs for FOLFOX-6 were higher than XELOX (R$66,433 vs. R$39,637). XELOX treatment generated a R$15,465 saving per patient due to a 92% reduction in the number of IV administrations. XELOX also presented a reduction of R$2,121.65 in costs related to the management of adverse events. A one-way sensi-
tivity analysis was conducted and confirmed the robustness of the results. CONCLUSIONS: Findings suggest XELOX as a cost-saving therapy for the first line treatment for mCRC under the payer perspective in Brazil when compared to FOLFOX-6, when compared to FOLFOX-6.

**PCN49**

**COST-MINIMISATION ANALYSIS OF MAINTENANCE THERAPIES FOR PROSTATE CANCER IN THE UK**

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**OBJECTIVES:** to compare the costs of maintenance therapy with currently used preparations for hormone-sensitive prostate cancer with a new leuprolin 6-month depot (L6) preparation.

**METHODS:** Patient data were extracted from the IMS Disease Analyzer observational database. UK patients with a diagnosis of prostate cancer and three or more prescriptions for goserelin or leuprolin were eligible. Individual prescription events were included if they were for goserelin 28-day depot (G28) or 12-week depot (G84) or for leuprolin one month or 3-month depots (L1 and L3). Total cost included drug cost, physician and nurse visits, prostate specific antigen (PSA) testing, and payments for implant administration. The cost of treatment with a newly available L6 was estimated by varying the daily drug cost, and assuming resource use equivalent to L3. **RESULTS:** 118 patients reported 1262 prescriptions for L3 compared to 600 patients (8433 prescriptions) for G84, 36 patients (489 prescriptions) for L1 and 272 patients (2984 prescriptions) for G28. A separate visit for implant administration was required for 35% of prescriptions with L3, 29% with L1, 41% with G84 and 28% with G28. PSA testing, although recommended in the UK, occurred infrequently around the time of prescription (5% of events). The cost per patient of one year of treatment was £1656 with L3, £1507 (G84), £1594 (L1) and £1212 (G28). The cost of one year treatment with L6 if based on the daily drug cost of L3, would be £1580. Applying the daily drug cost of G28 resulted in £1169, while applying the G84 daily cost increased it to £1235. Patient drug costs ranged from 52% of the total cost (G28) to 95% (L6). **CONCLUSIONS:** The cost of maintenance therapy for hormone sensitive prostate cancer is lower when longer-acting preparations are given, due principally to reductions in non-drug cost such as GP visit costs.

**PCN50**

**COST-MINIMIZATION ANALYSIS OF ERLOTINIB VERSUS DOCETAXEL OR PEMETREXED AS A SECOND-LINE TREATMENT OF ADVANCED NON-SMALL-LUNG CANCER (NSCLC) IN THE CONDITIONS OF THE CZECH REPUBLIC**

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**OBJECTIVES:** To assess the pharmacoeconomic evaluation of erlotinib used in the second line treatment of metastatic and developed locoregional non-small lung cancer in the conditions of the Czech reimbursement policy. We compared costs of tyrosine-kinase inhibitor erlotinib with the other cytostatic agents docetaxel and pemetrexed recommended according to Czech oncological guidelines. **METHODS:** In the absence of head to head studies we used data based on clinical trials comparing docetaxel and pemetrexed (JMEI) and BR21 study comparing erlotinib and placebo. We conducted cost-minimization analysis from the perspective of the payer. We calculated costs of drugs, administration, monitoring, premedication, transport of patients and management the hematologic toxicities. Prices of drugs were based on the list of reimbursement of drugs provided by an reimbursement agency (State Institute for Drug Control) and payments for health interventions were collected from the prices of health care published by health insurance companies. **RESULTS:** The costs were calculated for four therapeutic cycles which referred to median number of cycles administered in the clinical trials and it was in a concordance with the median value of progression-free survival. The total costs associated with therapy were €207,238, €131,720 and €320,000 CZK (£8,635, £5,488 and £13 333) for erlotinib, docetaxel and pemetrexed. The acquisition cost was 310,720 CZK (£12,429) for pemetrexed, 206,565 CZK (£8,263) for erlotinib and 104,832 (£4,193) for docetaxel. Erlotinib has more favourable tolerability profile whereas the cost of adverse events in docetaxel arm was 23,388 CZK (£936) and in pemetrexed arm 5,969 CZK (£239). Also the administration, monitoring and transportation costs of erlotinib was significantly lower than for docetaxel and pemetrexed. **CONCLUSIONS:** The less costly alternative in second-line therapy of metastatic non-small lung cancer was docetaxel because of lowest acquisition price. Erlotinib has lowest toxicity, administration and transportation cost. The cost of erlotinib is partly compensated by the reduction of toxicity and management/administration costs.

**PCN51**

**POTENTIAL ECONOMIC AND HEALTH IMPACT OF GENOMICS AND PROTEOMICS TECHNOLOGY FOR THE TREATMENT OF ACUTE MYELOID LEUKEMIA**

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**OBJECTIVES:** Current technology does not adequately predict the prognosis of patients with acute myeloid leukaemia (AML). Many patients therefore undergo unneeded but costly and toxic treatment. However, innovative approaches using genomics, epigenomics and proteomics technology are being developed to ameliorate this problem. The aim of this study was to estimate the potential economic and health impact of these technologies for AML. **METHODS:** This study was based on a literature review and expert opinion regarding the epidemiology, clinical practice and costs relating to AML and its treatment. Data were subsequently analysed using decision modelling. **RESULTS:** Conventional methods help to divide patients into three categories: favourable prognosis (20% of patients, >60% chance of survival); intermediate prognosis (60%, 30–40%); and poor prognosis (20%, <20%). Improved diagnostics would reduce the frequency and costs of unneeded treatment (chemotherapy, stem cell transplantation). Specifically, it could reassign some intermediate prognosis patients to the favourable prognosis category (approx. 10%) and others to the poor prognosis category (approx. 20%). Cost-savings could be €10,000–15,000 per patient assuming average costs of €100,000. Avoidance of unnecessary therapy would also reduce frequencies of side-effects. While better diagnostics would also result in some extra costs because of treating patients more intensively, these treatments would also lead to health gain. Given current diagnostic costs of €1500–5000 per patient and the high volume of tests, the cost reduction achievable by improving AML diagnostics would save millions of euros per year. **CONCLUSIONS:** Improved AML diagnostics would reduce some diagnosis, prognosis, and treatment costs. Any increased treatment costs would be coupled with health gain. In addition, rapid testing would reduce the time needed to develop a treatment plan and may thereby improve prognosis.