

lower than that with Herceptin-IV in the management of patients with HER2+ EBC and MBC. Hence, the substitution of Herceptin-IV with Herceptin-SC can produce valuable savings for the Greek health care system, especially in the current economic environment where hospitals' pharmaceutical budget has significantly been reduced.

PCN152 COST-MINIMIZATION ANALYSIS OF BEVACIZUMAB VERSUS CETUXIMAB IN FIRST-LINE TREATMENT FOR METASTATIC COLORECTAL CANCER IN KRAS WILD-TYPE PATIENTS IN THE SUPPLEMENTARY HEALTH CARE SYSTEM IN BRAZIL

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OBJECTIVES: Due to increasing costs in cancer management, there is a crescent need to rationally allocate resources in health care systems. Recently, a head-to-head phase III study (CALGB80405) showed no significant difference in OS and PFS for first line (1L) mCRC in KRAS wild-type (wt) patients amongst bevacizumab (Bev) and cetuximab (Cet) – the most commonly used biologics in this setting. Since benefit of both drugs is comparable, the aim of the study was comparing treatment costs of Bev vs. Cet in 1L KRAS wt mCRC. **METHODS:** A cost-minimization analysis was conducted under payer perspective in Brazilian Supplementary Healthcare System. Backbone chemotherapy regimens (mFOLFOX6 and FOLFIRI) were based on CALGB80405 trial. Direct medical costs regarding drug acquisition, material and procedures/service fees were included. Adverse events management costs were excluded. The resource usage data was taken from the literature and drug labels. Costs were taken from CMED price list and UNIMED reimbursement lists. A univariate sensitivity analysis was conducted varying parameters from $\pm 20\%$ range. Results were reported in Brazilian Reals (BRL). **RESULTS:** The average monthly cost per patient was lower with Bev: BRL23'945 (Bev+mFOLFOX6) vs. BRL30'017 (Cet+mFOLFOX6) – reduction of 20.2% - and BRL23'008 (Bev+FOLFIRI) vs. BRL29'075 (Cet+FOLFIRI) – reduction of 20.9%. Average monthly cost per patient according to mFOLFOX6/FOLFIRI usage proportion reported on CALGB80405 was BRL23'699 (Bev) and BRL29'766 (Cet); considering PFS data presented in the trial, the average total treatment cost was estimated as BRL256'899 (Bev) and BRL311'060 (Cet). The sensitivity analysis showed that model was more influenced by Cet price, Bev price and patient height. **CONCLUSIONS:** Bev is a cost-saving choice for 1L KRAS wt mCRC in combination with chemotherapy, potentially achieving around 20% of reduction in monthly direct treatment costs compared to Cet, mainly because of Cet higher total acquisition costs and weekly administration schedule, resulting in additional resource consumption.

PCN153 ECONOMIC IMPACT OF USING SUBCUTANEOUS TRASTUZUMAB

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OBJECTIVES: To analyze the economic impact of the incorporation of trastuzumab subcutaneous (TSC) in a University Hospital according to real data of our patients. **METHODS:** Retrospective cost minimization study that included patients diagnosed with breast cancer treated with trastuzumab intravenous (TIV) from april 2013 to april 2014. The demographic data of the patients (age and weight) and antineoplastic treatments used were obtained from the computer program Hospiwin®. An economic model was developed in Excel® data base, based on the dose used in previous clinical trials: IV loading dose of 8mg/kg and after 6mg/kg/3 weeks and SC fixed dose of 600 mg/3 weeks. The time horizon was one year and the perspective of medical leadership of the hospital was used. The Spain cost of TSC is not approved yet. Two possibilities was analyzed: The cost of filing 600mg of TSC equal to the cost of a 68kg patient with TIV (situation A) and the cost of a 63kg patient with TIV (situation B). A sensitivity analysis included the cost of using an oncology chair (168€/treatment) was performed. **RESULTS:** During the study period 371 patients were treated for breast cancer. Of these 75 were treated with TIV (20.2%), with an average weight of 71.5 kg (SD=17.1) and a cost of 990,996.88€/per year. If all patients had been treated with TSC: Situation A the total spending would be 829,965.4€; situation B the total spending would be 768,938.5€. So the savings would be 161,031.4€ (19.4%) and 222,058.3€ (28.8%) respectively. If the cost of oncology chair (not necessary for the TSC) it's included, the savings would be 253,549.4€ and 314,576.3€ respectively. **CONCLUSIONS:** In this study we wanted to show how TSC saved costs in all of the situations analyzed. The TSC is a therapeutic innovation that helps promote the systems health's sustainability.

PCN154 PHARMACOECONOMIC ANALYSIS OF ORAL CAPECITABINE AND TEGAFUR FOR COLORECTAL CANCER TREATMENT IN RUSSIA

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OBJECTIVES: To conduct a pharmacoeconomic analysis of oral drugs, tegafur vs capecitabine, for advanced colorectal cancer (CRC) in adult patients. **METHODS:** Indirect comparison and network meta-analysis of clinical efficacy and safety of tegafur vs capecitabine and tegafur + calcium folinate vs capecitabine were performed. Cost-minimization analysis (CMA) with calculation of cost minimization difference was used for economic evaluation of studied drugs. **RESULTS:** There was no statistically significant difference in the full and partial objective tumor response between oral tegafur (both in monotherapy or in combination with calcium folinate) and capecitabine for advanced CRC treatment in an indirect comparison and network meta-analysis. Capecitabine vs tegafur + calcium folinate has less 3-4th grade stomatitis but there was no difference in the incidence of diarrhea and 3-4th grade nausea/vomiting. There was no difference in safety between tegafur

and capecitabine monotherapy in terms of incidence of diarrhea, vomiting, stomatitis/mucositis. The hand-foot syndrome occurred in less than 5% in case of tegafur. Tegafur (in monotherapy or in combination with calcium folinate) is less costly than capecitabine. The difference in costs in favor of tegafur monotherapy amounted to €1,956.97 per 1 patient per 6 months or €3,778.53 per year; of tegafur + calcium folinate - €2,168.12 and €4,220.06 per 1 patient per 6 and 12 months, respectively. **CONCLUSIONS:** Tegafur is a cost-saving option compared with capecitabine with similar efficacy and safety.

PCN155 COST-EFFECTIVENESS ANALYSIS OF BENDAMUSTIN-RITUXIMAB COMPARED TO CHOP-RITUXIMAB IN THE TREATMENT OF INDOLENT FOLLICULAR NON-HODGKIN LYMPHOMA IN THE CZECH REPUBLIC

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OBJECTIVES: There is new RCT phase 3 clinical evidence that bendamustin-rituximab (B-R) is more effective in terms of progression free survival compared to the standard of care CHOP-rituximab (CHOP-R) in indolent non-Hodgkin lymphoma (iNHL). Based on this RCT, we performed a cost-utility analysis of B-R compared to CHOP-R in the treatment of follicular iNHL (stage III and IV) in the Czech Republic. **METHODS:** We developed a life-time Markov cohort model with 28-day cycle length and 5 health states, i.e. on treatment, rituximab maintenance (R-M), stable disease, progression and death. Additionally, we modeled adverse effects of treatment and four sub-states during progression (observation, immunochemotherapy, R-M, post R-M). Transition probabilities and utilities were derived from published literature. Resource use (costs) was calculated from health care payer's perspective in cooperation with major Czech hemato-oncologic experts. Costs and outcomes were discounted by 3.5%. Probabilistic sensitivity analysis (PSA) with 1000 iterations using a willingness to pay (WTP) threshold equal to 3 times GDP per capita (40 100 EUR) in the Czech Republic was performed. **RESULTS:** Over a life-time horizon, B-R compared to CHOP-R brings additional 1.21 QALY (7.47 vs. 6.26) and 1.31 LYG (9.74 vs. 8.43). The incremental total costs were 1,368 EUR (total life time costs for B-R and CHOP-R were 43,080 EUR and 41,712 EUR, respectively). ICERs thus equal to 1,133 EUR/QALY and 1,044 EUR/LYG. The results of the PSA show that B-R is cost-effective in 100% iterations under the WTP threshold; and simultaneously in 99.3% iterations is cost-effective while using threshold equal to 7,300 EUR. **CONCLUSIONS:** B-R proved that it is a highly cost-effective therapy in patients with follicular iNHL. The higher costs of initial bendamustin treatment are in the long-term horizon offset by substantial savings of progression costs. There is 100% probability of B-R being cost-effective at the selected WTP threshold.

PCN156 'DE NOVO' QUANTIFICATION OF GENOTYPE-DIRECTED THERAPY WITH AFATINIB IN METASTATIC LUNG CANCER

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OBJECTIVES: The inhibition of epidermal growth factor receptor (EGFR) signaling pathway by innovative therapeutics presents promising upshots in oncology. Our study aims to quantify first-line treatment with afatinib, an irreversible tyrosine kinase inhibitor, compared to pemetrexed+cisplatin (pem+cis), for patients with metastatic lung adenocarcinoma harboring common EGFR mutations (DEL19 or L858R) in the Netherlands. **METHODS:** An area under the curve partitioned survival model, constructed to quantify lifetime consequences of therapy with afatinib versus pem+cis, was amended to the Netherlands. The updated (2014) LUX-Lung 3 trial results and data from public sources were used to populate the model. Study outcomes were expressed in quality-adjusted life years (QALY), incremental cost-utility ratios (ICUR) and net monetary benefits (NMB). The analyses were conducted from health care and societal perspectives. Uncertainty assessment was performed using one-way and probabilistic sensitivity analyses (PSA). **RESULTS:** Metastatic lung adenocarcinoma patients with common EGFR mutations (89%) had higher overall survival when treated with afatinib compared to pem+cis (HR: 0.78, p=0.10). The corresponding base-case ICUR was <€20,000/QALY gained. For the subgroup of patients harboring DEL19 mutations (49%), treatment with afatinib resulted in cost-savings. Although NMB calculations were favorable for the genotype-directed therapy, inclusion of the entire patient population (all EGFR mutations) resulted in higher incremental costs. PSA results of lung adenocarcinoma patients with common EGFR mutations showed that afatinib is >95% cost-effective compared to pem+cis at a €80,000 threshold. **CONCLUSIONS:** This study shows that genotype-directed therapy with afatinib improved survival in metastatic lung adenocarcinoma and translated itself as value-for-money, particularly for the DEL19 subgroup, in the Netherlands. Further research is encouraged to compare afatinib with reversible EGFR inhibitors in this setting.

PCN157 MODEL-BASED COST-UTILITY ANALYSIS OF ERYTHROPOIESIS-STIMULATING AGENTS FOR THE TREATMENT OF CANCER-TREATMENT INDUCED ANAEMIA IN THE UK NHS

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OBJECTIVES: To assess the cost-utility of erythropoiesis-stimulating agents (ESAs) in conjunction with red blood cell transfusions (RBCTs) in patients with cancer-treatment induced anaemia (CIA). **METHODS:** A cost-utility analysis from an NHS and personal social services perspective was conducted by developing an ad hoc economic model. A lifetime time horizon was used and outcomes were discounted at 3.5% per annum. All ESAs were assumed to have the same clinical effectiveness. Haemoglobin (Hb) levels were assumed to drive health-related quality of life (HRQoL), with haemoglobin linearly mapped to utility. This was used to calculate