provides benefits at other fracture sites as shown in the postmenopausal pivotal trial FREEDOM, the ICER reduces to €19,726. a probabilistic SA showed that denosumab was a cost-effective option for a willingness to pay >€60,000. **CONCLUSIONS:** Denosumab prevents vertebral fractures in patients with PrCa receiving ADT and is cost-effective versus no treatment. Vertebral fractures significantly reduce quality of life and since there is no other licensed treatment in Sweden, denosumab represents an important option in PrCa at commonly accepted CE thresholds in Sweden.

PCN84

COST-EFFECTIVENESS OF ERLOTINIB IN FIRST-LINE TREATMENT OF ADVANCED NON-SMALL CELL LUNG CANCER (NSCLC) IN FIT ELDERLY PATIENTS: AN ECONOMICAL ANALYSIS OF A PROSPECTIVE PHASE 2 STUDY (GFPC 0504)

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OBJECTIVES: Median age of newly diagnosed non-small cell lung cance (NSCLC) is 70 years (with 1/3 older than 75 years) and elderly are more vulnerable to chemotherapy. In this population, weekly gemcitabine and docetaxel or erlotinib are both active in advanced NSCLC treatment. The GFPC0504 randomized prospective phase 2 study assess in fit elderly patients with advanced NSCLC, efficacy of weekly chemotherapy followed by erlotinib if progression (Arm A) versus erlotinib followed by chemotherapy if progression (arm B). The main objective of this study was time before second progression, secondary objective was overall survival. The objective of this study is to assess the cost-effectiveness of erlotinib in first-line treatment of NSCLC in fit elderly patients. **METHODS:** Outcomes (PFS and overall survival) and direct medical costs until second progression (from the third-party payer perspective) were prospectively collected. Costs after second progression and health utilities (based on disease states and grade 3–4 toxicities) were derived from the literature. **RESULTS:** For respectively 48 and 51 patients randomized respectively in arm a and B, PFS were 6.4 and 5.2 months, overall survival were 9.2 and 7.9 months; mean Qualy and mean direct costs (euros value 2010) were respectively €0.434 ± €0.394 and €26,297 ± €25,297 and €0.471 ± €0.451 and €25,948 ± €18,206. Acceptability curve will be presented at the meeting. **CONCLUSIONS:** In this population of fit ederly patients, erlotinb in first line, followed by chemotherapy if progression appears as dominant compare to chemotherapy followed by erlotinib if progression.

PCN85

SORAFENIB AND SUNITINIB IN METASTATIC RENAL CELL CARCINOMA: COST-EFFECTIVENESS ANALYSIS IN REIMBURSEMENT PROCEEDINGS VS. DATA FROM CLINICAL PRACTICE

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OBJECTIVES: Sorafenib and sunitinib are approved for patients with advanced or metastatic renal cell carcinoma after INF-a or IL-2 therapy failure or intolerance, with PS 0-1 and without CNS metastasis in defined cancer centers in the Czech Republic; sunitinib is reimbursed for first-line therapy in mRCC patients of good or intermediate risk. **METHODS:** We assessed the cost of sunitinib and sorafenib in patients treated in comprehensive cancer center and prepared cost-effectiveness analysis (CEA) to compare our data to CEA submitted by manufacturers to Czech authority (SUKL = State Institute for Drug Control) in reimbursement proceedings between 2008 and 2010. (1€ = 26CZK). **RESULTS:** CEA of sunitinib submitted to SUKL was based on cost of pharmacotherapy and clinical data of Motzer et al. study (NEJM 2007; time to PD: sunitinib 11 months, INF-a 5 months; duration of PD to death 6 months). Cost per progression-free year (PFY) was 324144CZK/12467€ in manufacturer's analysis, CZK867,946CZK/€33,383 in SUKL analysis (after INF-a cost reduction and costs after PD removal) and CZK2,304,914/€88,651 in our analysis (cost and effects of sunitinib based on our results; INF-a data were assumed identically). CEA of sorafenib was performed for patients after cytokine intolerance or failure (Escudier et al.; NEJM 2007) in comparison with sunitinib (70% pts) or BSC (30% pts). The cost per PFY was CZK965,726/€37,143 in manufacturer's analysis. Although sorafenib was cheaper alternative according to our results, time to progression was shortened by 18 days (ICER CZK516,820/€1,9878 per PFY). **CONCLUSIONS:** The cost per PFY in sunitinib was seven times lower in manufacturer's analysis than in CEA based on real data from cancer center. We assume that this was mainly caused by shorter time of pharmacotherapy in original study (6 vs. 11 months in our data). CEA of sorafenib demonstrated lower costs and effects in our analysis, because the significance of comparator (70% pts sunitinib) was underestimated in manufacturer's analysis.

PCN86

COST-EFFECTIVENESS ANALYSIS OF SPLANCHNIC NERVE BLOCKADE IN PATIENTS WITH CANCER AND VISCERAL PAIN IN THE UPPER ABDOMEN

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OBJECTIVES: The aim of a sympathetic blockade is to improve the analgesic response, diminish the opioid consumption, reduce the adverse effects from opioides, and get efficiency of costs related to treatment. We analyzed the cost-effectiveness of Splanchnic Nerves Blockade (SNB) versus drug therapy in patients with cancer and visceral pain at the upper abdomen. **METHODS:** A cost-effectiveness analysis was conducted within a retrospective, follow-up study in patients >18 years with cancer and visceral pain. Using medical records, we assessed patients that underwent a SNB between March 2005 and December 2009. We evaluated the visual analog pain scale (VAS), Karnofsky performance scale (KPS), and medical direct costs. The measures were evaluated before and after (1, 2, 3, 6, 9, and 12 months) the procedure. Cost methodology was calculated trough cost of illness and microcosting technique, to get the incremental cost-effectiveness ratio (ICER). **RESULTS:** Sixty-five patients were treated with SNB and 19 with drug treatment-WHO analgesic ladder steps (mean age 52.7 ± 12.9 and 54 ± 12.9, respectively). Basal characteristics were not different between them. VAS scores diminished in both arms, but at repeated measures ANOVA patients on SNB had better pain control ($P < 0.05$) and higher KPS ($P < 0.05$). The mean cost per patient in 1-year follow-up for the drug treatment group was $7512 MXP (CI 95% $1587–$13,436 MXP) and $5433 (CI 95% $5114–$5752) for SNB. The effectiveness measure was 80% for SNB versus 20% for the drug treatment group, respectively. The ICER obtained was negative (−$3526 MXP, IC 95% −5860 to −1191), favoring the SNB as a cost-saving alternative. **CONCLUSIONS:** SNB showed to be less costly and more effective than drug treatment alone. However, when a sensitive analysis (bootstrap methodology) was conducted, the sample size was not powerful enough for a precise CE estimate.

PCN87

PHARMACOECONOMIC ANALYSIS OF DIRECT MEDICAL COSTS OF METASTATIC COLORECTAL CANCER THERAPY WITH XELOX OR FOLFOX4 WITH OR WITHOUT BEVACIZUMAB AS THE FIRST-LINE TREATMENT

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OBJECTIVES: Pharmacoeconomic analysis of direct medical costs of mCRC therapy using XELOX/FOLFOX4, XELOX + BV/FOLFOX4 + BV. **METHODS:** Costs of diagnosis, medical services, and hospitalization were based on the price list for diagnostic and therapeutic procedures of Cancer Research Center n.a. N.N.Blokhin RAMS. The medical services patient should receive during the treatment and the frequency of their appointments were taken from the standards of medical care for patients with colon and rectum cancer. Cost analysis of anticancer drugs (16 courses of XELOX/XELOX + BV, 24 courses of FOLFOX4/FOLFOX4 + BV) and related drugs were based on the information about maximum selling import prices, registered, and entered into the State Register of prices of vitally essential drugs. The cost of other drugs was based on a database of retail prices for drugs in pharmacies, which was subsequently reduced by trade discount. **RESULTS:** In was calculated that the cost of diagnosis was 16,757 rubles and the medical services—379,815 rubles. The mCRC therapy as a first line by XELOX was 1,172,731 rubles and by XELOX + BV—2,526,110 rubles; by FOLFOX4—1,487,627 rubles and by FOLFOX4 + BV—2,843,558 rubles. The cost saving in applying the regime XELOX compared to FOLFOX4 regime amounted to 314,896 rubles. In applying the regime of XELOX in combination with BV in comparison with the regime of FOLFOX4 in combination with BV amounted to 317,448 rubles. Sensitivity analysis showed that the decrease and increase of the cost of capecitabine and bevacizumab in 20% for XELOX/XELOX + BV does not exceed the cost of regimes FOLFOX/FOLFOX4 + BV. **CONCLUSIONS:** From the pharmacoeconomic point of view, the most optimal is the use of XELOX and XELOX + BV regimes because of lower costs for neutropenia treatment, associated with an increased risk of infectious complications, as well as with a large number of hospitalization days.

PCN88

COST-EFFECTIVENESS ANALYSIS OF CANCER TREATMENTS IN SOUTH OF IRAN

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OBJECTIVES: To calculate the incremental cost-effectiveness of docetaxel-adriamicine-cyclophosphamide (TAC) against adriamicine- cyclophosphamide-5 flourouracil (FAC) in treatment of breast cancer in south of Iran. **METHODS:** A double blind study was applied on a cohort of 100 patients suffering from breast cancer with node-positive in the radiotherapy center of Namazi Hospital, Shiraz, Iran. The European organization for research and treatment of cancer questionnaire (EORTC QLQ-C30) was used for the measuring of quality of life at the first and last session of chemotherapy cycle. Third-party payer perspective was applied for costing side of evaluation. At last, two-way sensitivity analysis was used for ensuring the robustness of the results.

RESULTS: In spite of the same quality of life score at the first session of chemotherapy (74.5 out of 100), after finishing the chemotherapy cycle, patients in TAC arm had the lower score of QOL (64 in TAC vs. 68 in FAC) and higher range of toxicity and their medical costs were higher as well (the average costs in TAC was 391,176,968.2 Rials vs. 2,427,775.2 in FAC). ICER was negative that showed the dominant result for FAC comparing with TAC. **CONCLUSIONS:** It seems that because of the short horizon of the study, TAC regimen had the worse impact on the patient's quality of life during the chemotherapy cycle because of more side effects than FAC. It is believed that there is need for other studies with longer time horizons and specific attention to the effects of these treatments on survival and quality of life.

PCN89

PROJECTING THE POTENTIAL COST-EFFECTIVENESS OF A BREAST CANCER VACCINE IN COMPARISON TO OTHER STANDARD TREATMENTS: A DECISION ANALYTIC MODEL

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OBJECTIVES: Breast cancer is known to be one of the leading causes of death among the female population. Preventive measures may provide an economic and outcome advantage by reducing treatment costs and increasing survival. The objective of this study was to evaluate the cost-effectiveness of a breast cancer vaccine versus current standard treatments. **METHODS:** TreeAge software was used to calculate the cost-effectiveness. a decision tree was constructed for different probabilities of success and failure for the vaccine versus standard treatment. Costs and outcomes (life-years saved) ranges were obtained from published clinical trials. The vaccine effectiveness was projected from animal studies, with human clinical trials expected within a year. The range of effectiveness of the vaccine was considered between 30% and 90% with a baseline at 80%. The costs included for standard treatments ranged from $20,000 to $45,000 and the cost of the vaccine was assumed at $450 for three doses; therefore, the cost for vaccine ranged from $300 to $2000 depending on the number of doses. The incremental cost-effectiveness ratios were calculated from the range of costs and outcomes. Sensitivity analyses were performed to determine the robustness of the findings. **RESULTS:** Vaccination was found to be a potentially cost-effectiveness option with an ICER of 2384.146 relative to standard treatment. The incremental effectiveness was 8.2 life-years saved. The highest cost-effectiveness of the vaccine was at 90% success and a cost of not more than $1000 per individual. Sensitivity analyses indicated that the vaccine remained cost-effective over the range of model parameters. **CONCLUSIONS:** The breast cancer vaccine was projected to be the most cost-effective treatment option in this analysis. It is expected that better screening for breast cancer vaccine patient candidates will be available in the future.

PCN90

COMPARATIVE RETROSPECTIVE NON-RANDOMIZED PHARMACOECONOMIC TRIAL OF EFFICIENCY AND SAFETY OF USE OF PACLITAXELS (PACLITAXEL-LENS OR TAXOL) IN A MONOMODE FOR 2ND LINE OF TREATMENT OF METASTATIC BREAST CANCER PATIENTS

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OBJECTIVES: For the first time in a modern Russian economic conditions, it has been made pharmacoeconomics trial (PE) uses Russian generic of paclitaxel (Paclitaxel-Lens [PL]) in comparison with original drug (Taxol (T)) at chemotherapy (ChT) in a monomode for 2nd line of metastatic breast cancer (MBC) in real clinical practice. **METHODS:** It has been provided retrospective comparative nonrandomized clinical trial which have been included 70 patients for 35 patients of each group (PL or T) after analysis of 148 case records. **RESULTS:** At the analysis of effectively treatment MBC in group of the patients who have received T, the partial remission (PR, 28.5% against 10%) statistically significantly has been more often reached. At the analysis of safety, it has been shown that in group of the patients who have received PL, statistically significantly has been more often fixed hepatotoxicity (23.3% against 3.8%) and an anemia (19.2% against 3.5%). In group of the patients who have received T, statistically significantly has been more often fixed arthralgia/ myalgia (29.8% against 0%). Total direct costs (DC) in group of patients with T also there were above, than in group of PL, namely $10,727 and $9765 accordingly. Calculation of efficiency of expenses has shown that treatment of MBC by T more expensive and more effective, than treatment by PL. **CONCLUSIONS:** Thus, as a result of research, it has been established that: 1) Applying of T was more (from 7% to 11%) expensive, than PL, but gave the PR is much more often; 2) The alternative scenario and the sensitivity analysis shown to choose conditions when application of compared drugs will be economically more expedient; and 3) Thus, it is necessary to take into consideration, what application of PL was more often accompanied by hepatotoxicity and anemia, like arthralgia/ myalgia after using of T.

PCN91

BEVACIZUMAB + PACLITAXEL + CARBOPLATIN (BEV + PAC + CAR) VS. PEMETREXED + CISPLATIN (PEM + CIS) IN ADENOCARCINOMA NON-SQUAMOUS NON-SMALL CELL LUNG CANCER (NSCLC): A COST-EFFECTIVENESS ANALYSIS FROM A POLISH PUBLIC PAYER'S PERSPECTIVE

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OBJECTIVES: To determine and compare the cost-effectiveness of Bev + Pac + Car versus Pem + Cis regimens in the treatment of patients with adenocarcinoma non-squamous NSCLC from a Polish Public Payer's perspective. **METHODS:** Efficacy and safety of 15 mg of bevacizumab + 200 mg/m^2 of paclitaxel + 6 mg/mL/min of carboplatin versus 500 mg/m^2 of pemetrexed and 75 mg/m^2 of cisplatin was assessed based on a systematic review performed for both therapies according to evidence-based medicine principles. A cost-effectiveness analysis was performed with a lifetime (5 years) horizon and the National Health Fund perspective. a three state (progression-free, progression, death) Markov model was developed. Costs of 1st and 2nd line therapy, administration and monitoring, adverse events treatment, and palliative care were included. Sensitivity analyses testing the influence of length of time horizon, probability of progression, utilities, discounting rates, cisplatin dose, and the length and costs of 2nd line therapy were performed. **RESULTS:** Bev + Pac + Car results in 0.21 life-years gained per patient when compared to Pem + Cis in the treatment of patients with adenocarcinoma non-squamous NSCLC. The additional cost per patient was 18,840 pln (1 EURO = 4.1PLN) over patient's lifetime when Bev + Pac + Car was used instead of Pem + Cis regimen. The incremental cost-effectiveness ratio (ICER) was at an acceptable 91,216 pln. The sensitivity analyses demonstrated that the duration of 2nd line treatment (assumption of 2nd line treatment continuation for more than six cycles) considerably influenced the ICER (1,198 pln). Other sensitivity analyses confirmed the base-case results, proving conclusions' robustness. **CONCLUSIONS:** Based on this modeling analysis, 1st line Bev + Pac + Car therapy is a clinically superior and cost-effective treatment for patients with adenocarcinoma non-squamous NSCLC when compared to chemotherapies such as Pem + Cis.

PCN92

PHARMACOEPIDEMIOLOGICAL AND PHARMACOECONOMIC EVALUATION OF OXALIPLATIN IN PALLIATIVE CHEMOTHERAPY OF METASTATIC COLORECTAL CANCER (MCCR)

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The problem of original drugs substitution on generics presents in the Russian clinical practice due to rational expenditures allocation. Pharmaceutical bioequivalence of generic should be confirmed by therapeutic one. Only after such kind of confirmation, the mentioned substitution could be made in different segments of doctors' practice especially in anticancer chemotherapy. **OBJECTIVES:** To evaluate the clinical-economic interchangeability of the original oxaliplatin Eloxatine (EL) and local generic Exorum (EX) in the chemotherapy of mCCR. **METHODS:** The retrospective clinical-economic analysis of FOLFOX scheme for chemotherapy of mCCR with EL and EX in the real practice has been performed. Fifty case histories (23 with using of EL, 27—EX, was used nomogram of Altman's) were studied. The calculation of direct cost and cost-effectiveness ratio (CER) based on "partial regress + stabilization" parameter no less than 80% has been performed. **RESULTS:** For achievement of equal efficacy EL had less number of chemotherapy cycles and total dosage compared with EX (5,0 and 7,3; 670 mg and 900 mg, respectively). Adverse effects were more frequent in EX versus EL (59 and 38, respectively) and caused additional costs and prolonged hospitalization (9 days/patient compared to EL group). The utilitarian EX program cost per patient was less compared to EL by 7,7%. In the same time, CER calculated with total costs due to side effects treatment was practically equal (difference is 1,6% only). Cost prognosis for equal efficacy results with EL using is less by 28,6% versus EX. The alternative scenario has confirmed the clinical-economic added value of EL. **CONCLUSIONS:** The change of original EL for generic EX in FOLFOX scheme for mCCR has no economic advantages. EL substitution leads to increased number of chemotherapy cycles, higher dose of oxaliplatin, higher rate of adverse effects, and higher costs.

PCN93

COST-MINIMIZATION ANALYSIS OF XELOX (CAPECITABINE + OXALIPLATIN) VERSUS FOLFOX-4 (5-FU/LV + OXALIPLATIN) AS ADJUVANT TREATMENT IN STAGE III COLON CANCER UNDER THE BRAZILIAN PRIVATE PAYER PERSPECTIVE

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BACKGROUND: Colorectal cancer is the third leading cancer worldwide (INCA) with nearly 1.2 million cases and about 630,000 deaths expected in 2007 (ACS 2007). In Brazil, it is estimated 28,110 new cases in 2010 (INCA 2010). For patients with stage III colon cancer, the benefits from fluorouracil (5-FU)-based adjuvant chemo-