compared to imatinib 400 mg in patients with newly diagnosed CML from the health insurance perspective.

PCN152
COST-EFFECTIVENESS ANALYSIS OF CANCER RISK REDUCTION STRATEGIES FOR BRCA MUTATION CARRIERS
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Women with BRCA mutations inherit high risks of breast and ovarian cancer; options to reduce cancer risk include preventive surgeries or regular breast screening. Modelling studies on this issue indicate that preventive surgeries lead to better survival than routine surveillance (RS) alone. Still its costs and cost-effectiveness remain uncertain as well as the age when preventive surgeries should be made.**OBJECTIVES:** To evaluate the cost-effectiveness of different preventive strategies in women carrying BRCA1/2 mutation revealed at the age of 25 years. **METHODS:** Different active preventive strategies were compared, each included prophylactic mastectomy (PM) ± prophylactic oophorectomy (PO) at different ages and in different clinical situations, i.e. after breast cancer was diagnosed in one breast or before it. Cost-effectiveness analysis was conducted in the Markov model that included five health states: “disease free”, “cancer”, “no progression”, “progression” and “death”. The probability of health outcomes for BRCA mutation carriers aged 25-70 was derived from the published literature and national statistics. Direct medical costs for preventive services and cancer treatment were calculated on the basis of the tariffs of Russian Scientific Center of Roentgenoradiology. Incremental cost-effectiveness ratio (ICER) per life-year saved (LYS) was calculated if prevention strategy was more costly than RS. **RESULTS:** All assessed preventive surgeries are cost-saving in comparison with RS, except for bilateral PM + PO at age 50, which had ICER of €966 euros per LYS. The best option was bilateral PM + PO at age 40 as it resulted in most LYS at the least cost. **CONCLUSIONS:** Active preventive surgery is the cost-saving option for BRCA mutation carriers, the preferred strategy is bilateral PM + PO at age 40.

PCN153
COST EFFECTIVENESS OF SUNITINIB VERSUS PAZOPANIB AND BEST SUPPORTIVE CARE FOR THE TREATMENT OF METASTATIC RENAL CELL CARCINOMA IN CHILE
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OBJECTIVES: Assess the cost-effectiveness of Sunitinib (SU) versus Pazopanib (PA) and Best Supportive Care (BSC) for the treatment of metastatic renal cell carcinoma (MRCC) from the perspective of the Chilean public healthcare system. **METHODS:** A four health states Markov model was built: first and second line treatments, BSC and death. Expected costs were measured in Chilean pesos (1 USD = 654.07CLP$) and benefits in quality adjusted life years (QALYs) from aggregated data. Efficacy estimates were obtained from an indirect-treatment comparison analysis and costs were estimated from local sources. Utilities were obtained from the literature. A 10-year time horizon and 3% discount rate was considered for costs and outcomes. A probabilistic sensitivity analyses was performed to account for uncertainty. **RESULTS:** The total expected costs of treating MRCC with SU or PA are higher than BSC with slight differences between SU and PA (US$45,786 and US$43,255 respectively). Similarly, the expected incremental health benefit is small favoring SU (0.03 QALYs). However, the uncertainty around this estimate is important leading to a non-negligible probability that it may actually favor either treatment alternative. The base case scenario (current market prices for all treatments) shows an average ICER of PA versus BSC of US$62,327/QALY and an ICER of SU versus PA of US$85,885/QALY. At a suggested threshold of 3xGDP per capita (US$55.040), the probability of cost-effectiveness of SU and PA was 25% and 32% respectively. This probability increases to 38% and 45% respectively when their price is reduced a 25%. The ICER was most sensitive to the OS efficacy relative to BSC, where evidence showed important bias due to cross-over. **CONCLUSIONS:** Due to the limited expected incremental QALYs and high second order uncertainty, it is reasonable to manage this decision problem as a cost minimization exercise which is determined by the price of each treatment alternative.

PCN154
COST-EFFECTIVENESS ANALYSIS OF LIPEGFILGRASTIM IN PROPHYLAXIS OF FEBRILE NEUTROPENIA IN CANCER PATIENTS
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OBJECTIVES: To assess the cost-effectiveness of lipegfilgrastim compared with pegfilgrastim, filgrastim, lenograstim in prophylaxis of febrile neutropenia in cancer patients in Russia for 1-year period. **METHODS:** A decision tree was used to simulate the efficacy and costs of medicinal drugs. The data on drugs efficacy (measured as percentage of responders to the febrile neutropenia prophylaxis) was obtained from «Meta-analysis and indirect treatment comparison of lipegfilgrastim for the reduction of chemotherapy-induced neutropenia» by T.C. Bond. The following costs were taken into account: costs for the treatment course with granulocyte colony-stimulating factor drugs (including ones for administration of the drugs), costs for the treatment of a febrile neutropenia event, expenses for management of adverse events associated with administration of granulocyte colony-stimulating factor drugs. As a result cost-effectiveness ratio (CER) of G-CSF was calculated. **RESULTS:** Prophylaxis with lipegfilgrastim leads to the 1-year percentage of prophylaxis responders as 97,3%, pegfilgrastim, filgrastim, lenograstim results in 91,90%, 87,60% and 87,60% . As a result, the prophylaxis with lipegfilgrastim is characterized by the lowest cost-effectiveness ratio (217352 rubles/3289 $) as compared to prophylaxis with pegfilgrastim (342748 rub/5186 $), filgrastim (302077 rub./4571 $ for 11 days of prophylaxis), lenograstim (788582 rub./11932 $ for 11 days of prophylaxis) by the end of the 1st year of prophylaxis. Current rate taken as for 15.06.2016 is 1$ = 66,09 RUB. **CONCLUSIONS:** In the context of pharmacoeconomic analysis it is preferable to use lipegfilgrastim for prophylaxis of febrile neutropenia compared to other G-CSFs (pegfilgrastim, filgrastim, lenograstim), as it allows to increase the number of patients who responded to prophylaxis of febrile neutropenia while reducing costs as compared to other granulocyte colony-stimulating factor drugs.

PCN155
COST-EFFECTIVENESS ANALYSIS OF TREATMENT FOR RECURRENT MALIGNANT GLIOMA IN ROMANIA
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OBJECTIVES: Romanian public health policies must combine information about effective interventions for treatment of recurrent malignant glioma with information about costs’ interventions. **METHODS:** Costs of providing health interventions were comparing using the actual Romanian reimbursement list. We compared two treatments for demonstrate that each additional year of life gained from these interventions are equal performing a survival-gain analysis. Cost-effectiveness for the treatment (bevacizumab+irinotecan or dendritic cell immunotherapy-DCI) was estimated using an outcome indicator, survival-gain, that is defined as the difference between observed and predicted mOS. Effectiveness’ differences were concluded using the Mann-Whitney-Wilcoxon Test. **RESULTS:** The survival gain analysis consisted in identifying fourteen clinical studies with patients with recurrent malignant glioma that received a standard treatment with bevacizumab+irinotecan vs. a very expensive, non-existing treatment in Romania with DCI. The two interventions weren’t defined relative to adverse health events, only with reported median overall survival declared in the included studies. A total of 381 patients were included in our systematic review with 302(79.26%) of them receiving bevacizumab+irinotecan while 79(20.74%) received DCI. 233(77.15%) of the patients receiving bevacizumab plus irinotecan were diagnosed with glioblastoma, while only 69(22.85%) of the patients having grade III gliomas. In the DCI group, 58(73.41%) of the patients had GB while 21(26.59%) patients had grade III gliomas. In comparison, the studies following the bevacizumab+irinotecan protocol reported a mean survival-gain of -0.02±2.00 while the mean survival-gain was -0.01±4.54 for DCI group. We found that DCI compared with bevacizumab plus irinotecan does not improve statistically survival-gain (p=0.535). The costs for a 14 days of treatment with bevacizumab and irinotecan are approx. 2023Euro, whereas DCI that is not avaible in Romania costs about tens of thousands. **CONCLUSIONS:** These comparisons of different interventions for the same disease is a clear indication that more health gain is possible by spending resources on the treatment with bevacizumab+irinotecan.

PCN156
COST-EFFECTIVNESS ANALYSIS OF AXITINIB IN THE TREATMENT OF METASTATIC RENAL CELL CARCINOMA – CLINICAL DATA VS RWE
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OBJECTIVES: The aim was to compare costs and effectiveness of axitinib against everolimus in the treatment of metastatic renal cell carcinoma (mRCC) in sunitinib refractory patients from the perspective of the public healthcare payer in the Czech Republic. **METHODS:** A Markov model was developed to estimate the incremental cost per incremental quality-adjusted life year (QALY) gained of axitinib compared to everolimus in the treatment of mRCC in sunitinib refractory patients over a 10-year time horizon. Progression-free survival (PFS) and overall survival (OS) were selected as basic parameters of effectiveness. PFS and OS were calculated using parametric survival distributions estimated from Kaplan-Meier curves. As no head-to-head trials comparing axitinib and everolimus in treatment of mRCC in sunitinib refractory patients were found, three different approaches are shown: a naive approach comparing data from AXIS and RECORD trials, matching-adjusted indirect comparison (MAIC) comparing real world data for axitinib from Czech registry and clinical trial data for everolimus (RECORD trial) and Simulated Treatment Comparison of AXIS and RECORD trials. Among relevant costs (reflecting payer’s perspective) drug costs, monitoring costs and cost of adverse events were considered. **RESULTS:** In the naive comparison scenario axitinib is dominant compared to everolimus as it is less costly and generates more QALY. When using Czech real world evidence (RWE) and RECORD trial the incremental cost-effectiveness ratio (ICER) of axitinib reached 24,089.71 EUR per QALY gained. The last scenario (STC of AXIS and RECORD) the ICER was 23,000.43 EUR. All of the three scenarios scored way under the level of Czech willingness to pay (WTP) 43,584.06 EUR. **CONCLUSIONS:** Axitinib proved efficacy in the real clinical practice in the Czech Republic. The cost-effectiveness analysis also showed that axitinib can be considered a cost-effective treatment for mRCC sunitinib refractory patients when compared to everolimus.

PCN157
ECONOMIC EVALUATION OF PERTUZUMAB IN COMBINATION WITH TRASTUZUMAB AND DOCETAXEL IN THE NEOADJUVANT TREATMENT OF WOMEN WITH HER2-POSITIVE, LOCALLY ADVANCED, INFLAMMATORY OR EARLY BREAST CANCER IN PORTUGAL
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OBJECTIVES: To evaluate the cost-effectiveness and cost-utility of pertuzumab in combination with trastuzumab and docetaxel (PTD) compared to trastuzumab and docetaxel (TD) as neoadjuvant treatment in women with locally advanced, inflammatory or early stage HER2 positive breast cancer in the Portuguese National Health Service (NHS) and societal perspectives. **METHODS:** A Markov model was developed comprising six stages to estimate lifetime (50 years) costs and outcomes – quality adjusted life years (QALYs) and life years (LYs). Transition probabilities to progressive disease and death as well as adverse events (AE) rates were based on