OBJECTIVES: To identify the dominant scheme of mRCC second-line target treatment (compare two alternatives – Axitinib and Everolimus). **METHODS:** Based on the Markov model, the cost-effectiveness analysis was realized. Overall survival, annual survival rate, time to progression of disease and direct cost of mRCC treatment was evaluated. Costs analysis included: costs of two target therapy lines (Sunitinib as a first-line in combination with Axitinib or Everolimus treatment); cost of 3 and 4 grade side effects compensation; cost of diagnosis and inpatient care; cost of disease progression; cost of palliative and best supportive care. **RESULTS:** During the pharmacoeconomic analysis of Axitinib use as a second-line therapy for mRCC, it was found that this target therapy regimen would significantly increase the time to progression and the overall survival which amounted to 22,75 months, with an annual survival rate of 68%, 38% and 17% of patients following the first, second and third year of treatment, respectively. Despite the high cost of this treatment regimen, reaching 51.327 EUR at the horizon of ten year study, the treatment regimen including Axitinib will be characterized by the lowest values of the cost-effectiveness ratio, reflecting the costs incurred by the health care system for patient's life saving, and incremental cost-effectiveness ratio, which was less than willingness to pay threshold in Russia. **CONCLUSIONS:** It is shown, Axitinib use as second-line of target therapy in patients with mRCC is the most preferable treatment regimen then Everolimus from the pharmacoeconomic point of view.

PCN142
COST-EFFECTIVENESS ANALYSIS OF HYDRALAZINE AND MAGNESIUM VALPROATE LP ASSOCIATED WITH TREATMENT FOR ADULT PATIENTS WITH METASTATIC RECURRENT OR PERSISTENT CERVICAL CANCER IN MEXICO

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OBJECTIVES: Demonstrate through an economic evaluation of cost-effectiveness that using Hydralazine LP magnesium valprate (Transkrip ®) associated with first-line chemotherapy in the treatment of persistent or recurrent metastatic stage IVB cervical cancer, type not candidates for surgery or radiotherapy is more effective than the alternatives available in Mexican health institutions: cisplatin with topotecan (CT), cisplatin with paclitaxel (CP), cisplatin with vinorelbine (CV), carboplatin with paclitaxel (CaP), paclitaxel (P), cisplatin and cisplatin with gemcitabine © (CG). **METHODS:** A cost-effectiveness analysis was developed, using a Markov model with a time horizon of 2 years divided into 24 monthly cycles, the measure of effectiveness was determined as the years gained free survival (PFS), being an advanced cancer is significant, only were measured direct medical costs, an analysis of incremental cost-effectiveness was performed. To test the robustness of the model a deterministic and probabilistic sensitivity analysis was performed. **RESULTS:** The cost per patient using therapy with hydralazine LP magnesium valproate (Transkrip ®) is $ 142,109.93, gaining 0.8846 years in Progression free survival this treatment was more effective but more expensive, paclitaxel had a cost of $ 26,988.64 with 0.3631 years in PFS, this therapy is less expensive but more effective than all comparators. The ICER of (Transkrip ®) was $ 220.757 pesos per year in PFS versus paclitaxel. **CONCLUSIONS:** The economic results of treatment of patients with metastatic cervical cancer, through an epigenetic therapy with hydralazine LP magnesium valproate (Transkrip ®) over a time horizon of two years showed that hydralazine LP magnesium valproate (Transkrip ®) is a cost effective alternative respect to comparators showed a greater response in years of progression-free survival and ICER below of 2 GDP.

PCN143
PRIORITIZATION OF FUTURE OUTCOMES RESEARCH STUDIES IN CHRONIC MYELOID LEUKEMIA: VALUE OF INFORMATION ANALYSIS

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OBJECTIVES: Value-of-Information analysis can help to guide decision about future research priorities: If and what further research is needed? Our aim was to guide decision regarding future outcomes research on parameters related to different regimens for chronic myeloid leukemia (CML). **METHODS:** We updated a previously developed state-transition Markov model of CML, which evaluates seven treatment regimens including tyrosine kinase inhibitors, chemotherapy and stem cell transplantation (SCT). We derived model parameters from published trials data, Austrian clinical, epidemiological, and economic data. We performed a cohort simulation over a lifetime horizon, adopted a societal perspective, and discounted costs and benefits at 3% annually. We calculated the expected value of perfect information (EVPI), partial perfect information (EVPPI), and the population EVPI (PEVPI). Additionally, we examined the expected value of sample information (EVSI) for different trial sizes. **RESULTS:** Three strategies are on the efficiency frontier: imatinibàchemotherapy/SCT, nilotinibàchemotherapy/SCT (140,000 €/QALY) and nilotinibàdasatinibàchemotherapy/SCT (176,000 €/QALY). The EVPI for eliminating all uncertainty resulted in a curve with two peaks. One peak is around a WTP threshold of 150,000 €/QALY (EVPI 4,600 €) and another peak is at 180,000 €/QALY (EVPI 7,700 €). The PEVPI for Austria assuming a 10-year technology horizon was 2.5 million € (WTP 150,000 €/QALY) and 4.5 million € (WTP 180,000 €/QALY). EVPPI identified four parameters most responsible for decision uncertainty: duration of first-line therapy, probability of progressing from chronic phase to accelerated phase, probability of receiving a SCT, and the health-utility after SCT. The EVSI commented on the optimal study size for these parameters given the cost of obtaining information. **CONCLUSIONS:** Acquiring additional evidence could prove valuable for determining optimal treatment regimens for chronic myeloid leukemia. If further research were funded, studies should examine a combination of natural history, treatment, and quality of life parameters, especially the effectiveness of first-line TKI treatment.

PCN144
DECISION ANALYSIS ON THE COST-EFFECTIVENESS OF SEQUENTIAL TREATMENT STRATEGIES FOR PATIENTS WITH CHRONIC MYELOID LEUKEMIA IN THE UNITED STATES

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OBJECTIVES: The first goal was to adapt an existing Austrian decision-analytic model for chronic myeloid leukemia (CML) treatment to the US-American health care context. Secondly, we updated the model with new data and further treatment strategies to identify the most effective and most cost-effective strategy for the treatment of CML patients with different sequential tyrosine kinase inhibitors (TKIs). **METHODS:** We evaluated 18 different treatment strategies within the US-American setting in terms of survival, quality-adjusted survival and costs. For model parameters, data from literature, a US-American expert survey, the Utah Cancer Registry, and economic data from a US-American database were used. Evaluated treatment strategies included imatinib, dasatinib, nilotinib, bosutinib, ponatinib, stem-cell transplantation and chemotherapy. The Markov state-transition model was analyzed as a cohort simulation over a lifelong time horizon, a third-party payer perspective was adopted and a discount rate of 3% was used. Additionally, several deterministic and probabilistic sensitivity analyses were conducted. **RESULTS:** Imatinib without second-line TKI resulted in an incremental cost-utility ratio (ICUR) of $148,700/QALY gained (incremental cost-effectiveness ratio (ICER) of $128,800/Lys) compared to baseline strategy 'chemotherapy'. Imatinib with second-line nilotinib yielded an ICUR of $217,100/QALY gained (ICER $242,200/LY) compared to imatinib without second-line TKI. Imatinib followed by second-line bosutinib had an ICUR of $331,300/QALY gained (ICER $265,100/LY) compared to imatinib followed by second-line nilotinib. Imatinib with second-line dasatinib produced an ICUR of $343,200/QALY gained (ICER $279,600/LY) compared to imatinib with second-line bosutinib. All remaining strategies were excluded due to dominance. ICURs and ICERs obtained from the probabilistic sensitivity analysis deviated up to 6.5% (2.5%) compared to base-case ICURs (ICERs). **CONCLUSIONS:** Based on our analysis and current treatment guidelines, we recommend imatinib followed by second-line nilotinib as the most cost-effective treatment strategy. Our model results may support clinicians and patients in CML treatment decision making.

PCN145
THE COST-EFFECTIVENESS OF BRENTUXIMAB VEDOTIN IN HODGKIN LYMPHOMA IN SWEDEN

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OBJECTIVES: To assess the cost-effectiveness of using brentuximab vedotin (BV) in treating relapsed or refractory Hodgkin Lymphoma compared to standard chemotherapy and allogeneic stem cell transplant in the Swedish health care setting. Brentuximab vedotin is a novel antibody drug conjugate targeting CD-30 and is indicated for treating relapsed/refractory Hodgkin Lymphoma. **METHODS:** A Markov model with a lifetime horizon was constructed to compare BV to chemotherapy or allogeneic stemcell transplant (alloSCT). The analysis had a societal perspective and included lost productivity using a human capital approach. The model uses comparators relevant to Sweden and all epidemiological and cost parameters were based on Swedish sources. Both costs and effects were discounted at 3% according to Swedish guidelines. Clinical effectiveness for BV was based on pivotal clinical trial results and published data from the literature for the comparators relevant to the reimbursement authorities and to enable long term modelling. Outcomes were measured in QALYs. Uncertainty was addressed both through probabilistic sensitivity analysis and one-way analyses of central variables. **RESULTS:** Brentuximab vedotin dominated alloSCT (i. e a lower treatment cost and a better health outcome) and the ICER when compared to chemotherapy was SEK 419 000 (€47 000). One-way sensitivity analyses showed that the results were stable when central variables were varied. The probabilistic analysis also showed that brentuximab vedotin had a high probability of being the most cost-effective treatment at the accepted threshold values for all scenarios. **CONCLUSIONS:** The ICERs calculated were all below commonly accepted willingness to pay for a QALY in Sweden for both comparator scenarios. Brentuximab vedotin is a cost effective treatment option for relapsed/refractory Hodgkin Lymphoma in the Swedish health care setting.

PCN146
ECONOMIC EVALUATION OF AXITINIB FOR SECOND LINE TREATMENT IN ADULT PATIENTS WITH ADVANCED RENAL CELL CARCINOMA – THE PORTUGUESE CASE

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OBJECTIVES: This study estimated the cost-utility of axitinib after sunitinib failure in adult patients with renal cell carcinoma. Total costs and quality adjusted life years accrued with axitinib was compared to everolimus, the only drug for second line treatment financed by the Portuguese National Health Service. **METHODS:** A 4-week cycle Markov model with three health states (progression free, post progression, and death) was adapted to the Portuguese setting. In the absence of head-to-head clinical trials and the unfeasibility of a standard indirect comparison, relative efficacy was based on a previous simulated treatment comparison. Axitinib trial data on quality of life (utility) was used for the progression free stage and