OBJECTIVES: To assess the incremental cost-effectiveness ratio (ICER) of obinutuzumab in association with chlorambucil (GCB) for CLL previously untreated patients unsuitable for full-dose fludarabine based therapy, in the Portuguese National Health Service (NHSP) perspective. Comparators are rituximab in association with chlorambucil (RCB) and chlorambucil alone (Cib). METHODS: A Markov model developed by Roche was used to predict disease progression and mortality, assuming weekly cycles and a 25 years’ time horizon. Preclinical clinical data was based on CLL11 clinical trial (Goede et al., 2015), and postprogression data based on Lichhorst et al. (2009). Utility values were obtained on Kosmas et al. (2014). Only direct medical costs were included, being resource cost estimated through a seven Portuguese experts panel and unit costs taken from official sources. A 5% discount rate was applied to both costs and consequences. RESULTS: In comparison to RCB, the use of GCB increases clinical gains by 1.07 LY and 0.99 QALYS at an additional cost of 24,104€. Consequently, GCB costs 18,112€ per LY and 18,948€ per QALY in comparison to RCBs and 22,447€ per LY and 24,352€ per QALY in comparison to GCB. Sensitivity analysis shows that results are mainly sensitive to the extrapolation methods of preclinical survival and to utility values. CONCLUSIONS: The use of obinutuzumab in association with chlorambucil for CLL patients that are unsuitable for full-dose fludarabine based therapy implies added costs per LY and per QALY that are generally accepted in Portugal. The cost-effectiveness ratios of obinutuzumab in association with chlorambucil (GCB) are below 25,000€ when compared both to rituximab alone with chlorambucil (RCB) and to chlorambucil alone (Cib). PCN192 COST-EFFECTIVENESS OF CETUXIMAB IN FIRST-LINE TREATMENT OF PATIENTS WITH METASTATIC COLORECTAL CANCER IN BELGIUM AND THE NETHERLANDS Krol M1, Ovcinnikova O2, van Hohnhorst P3, Jarrett J2
1Merck Serono, Schiphol-rijk, The Netherlands, 2Mapi, London, UK, 3Merck Serono, Frankfurt, Germany
OBJECTIVES: This study aimed to assess the cost-effectiveness of first-line treatment of patients with cetuximab in combination with either FOLFOX or FOLFIRI with wild type ras carcinoma viral oncogene (RASt) metastatic colorectal cancer in Belgium (B) and the Netherlands (NL) compared with treatment with FOLFOX or FOLFIRI. METHODS: A Markov model was developed to estimate the incremental cost-utility ratios (ICURs) of the following first-line treatment comparisons: cetuximab + FOLFOX vs. FOLFOX and cetuximab + FOLFIRI vs. FOLFIRI. The model was parameterized using data where possible from R1897SC, a non-hodgkin’s lymphoma trial. The ICURs were considered including cetuximab and RASw data. Survival was estimated based on a disease modelling approach. Two versions of the model were created, one for NL and one for B. Country specific costs were included and second- and third-line treatments differed between NL and B. In line with the country’s health economic guidelines, analyses were conducted from a societal perspective (NL) or a health care perspective (B). Costs were discounted with 4% (NL) or 3% (B) and effects with 1.5%. The models adopted a 20 year time horizon. A probabilistic sensitivity analysis was conducted to account for uncertainty. RESULTS: The ICURs for NL and B were €86,180 and €55,430 for cetuximab + FOLFOX vs. FOLFOX and €183,151 and €42,453 for cetuximab + FOLFIRI vs. FOLFIRI. The ICURs were calculated around the ICURs of 25,000€ in the FOLFOX arms and considerable in the FOLFIRI arms. CONCLUSIONS: NL and B have no official ICUR thresholds, but unofficial upper limits are assumed to be around 45,000€ and to chlorambucil alone (Clb). Sensitivity analysis shows that results are mainly sensitive to the extrapolation methods of preclinical survival and to utility values. The ICURs for NL and B were €30,000/QALY (95CI: 25,556-35,795). The probability of cost-effectiveness of regorafenib was 51.8%, for a willingness to pay of €30,000/QALY. CONCLUSIONS: Below an ex-factory price of 2,234€, the treatment with regorafenib is unselectable and/or metastatic GIST whose disease has progressed on imatinib and sunitinib represents a cost effectiveness assignment of response. PCN195 THE COMPARATIVE PHARMACOECONOMIC ANALYSIS OF USING PLEXIFRAK TO STEM CELL MOBILIZATION FOR AUTOLOGOUS PERIPHERAL STEM CELL TRANSPLANTATION FOR NON-HODGKIN’S LYMPHOMA PATIENTS Krysanov V1, Krysanov I2
1I.M. Sechenov First Moscow State Medical University, Moscow, Russia, 2Postgraduate Medical Institute, Moscow National University of Food Production, Moscow, Russia
OBJECTIVES: Autologous peripheral stem cell transplantation (ASCT) with high-dose chemotherapy, cyclophosphamide, melphalan and busulfan (CyMoBu) is the standard single- or double-duct therapy for the first-line treatment of non-Hodgkin’s lymphoma (NHL) patients. Granulocyte colony-stimulating factor (G-CSF) with plerixafrin (G-P) is superior to G-CSF alone for stem cell mobilization (SCM) in heavily pretreated NHL patients. The main aim of this study was to perform comparative pharmacoeconomic analysis of using G-P versus G-CSF as a method for SCM. METHODS: Analysis of the published clinical trials was conducted to evaluate comparative efficacy and safety of the studied therapy options. Taking into account the hypothesis of superior effectiveness of combination G-P for SCM for pharmacoeconomic analysis was chosen a “cost-utility” analysis. For this study was adopted a Markov model simulated the care process of NHL patients undergoing ASCT using data from the Washington University Phase III study (Kyeser SM et al., 2018). Direct medical costs included diagnosis, mobilization and mobilization costs, apheresis, CD34+ cell processing and cryopreservation. Mobilization and mobilization costs were assigned to be costs of medical procedures, resource utilization, and medication. The incremental cost-utility ratio (ICUR) was estimated. One-way sensitivity analysis was made. RESULTS: According to published trials the combination G-P has been shown to mobilize more CD34+ cells than G-CSF alone as ASC. Additionally, G-P mobilization resulted in more predictable days of collection, no weekend apheresis procedures, and no unscheduled hospital admissions. The expected lifetime cost of providing care for NHL patients using G-P was 601 294 rubles ($11 227) more than G-CSF, but they accumulated 1.75 more quality adjusted life years (QALY) for an ICUR of 343 596 rubles ($6 415)/QALY. The one-way sensitivity analysis was made. RESULTS: When compared to Clb, the use of GClb increases clinical gains by 1.07 LY and 0.99 QALYS at an additional cost of 12,472€. When compared to Clb, the use of GCB increases clinical gains by 1.07 LY and 0.99 QALYS at an additional cost of 24,104€. Consequently, GCB costs 18,112€ per LY and 18,948€ per QALY in comparison to RCBs and 22,447€ per LY and 24,352€ per QALY in comparison to GCB. Sensitivity analysis shows that results are mainly sensitive to the extrapolation methods of preclinical survival and to utility values. The ICURs for NL and B were €30,000/QALY (95CI: 25,556-35,795). The probability of cost-effectiveness of regorafenib was 51.8%, for a willingness to pay of €30,000/QALY. CONCLUSIONS: Below an ex-factory price of 2,234€, the treatment with regorafenib is unselectable and/or metastatic GIST whose disease has progressed on imatinib and sunitinib represents a cost effectiveness assignment of response. PCN196 EFFICIENCY OF EXPENSES OF GEFITINIB IN PATIENTS WITH NON-SMALL CELL LUNG CANCER AS A SECOND LINE THERAPY Rudakova AV1, Meshkov DO2, Khabiev RI2, Beznemiszyova LV1
1St. Petersburg Chemical-Pharmaceutical Academy, St. Petersburg, Russia, 2National Research Institution for Public Health, Moscow, Russia
OBJECTIVES: Therapy of non-small cell lung cancer is a very complex clinical problem. Revealing of an optimum version of therapy requires not only the analysis of drug effectiveness but also the estimation of efficiency of expenses for applied medical products. Objective of research was an assessment the efficiency of expenses of Gefitinib in patients with non-small cell lung cancer as a second line therapy. METHODS: Modeling was made on the basis of results of clinical researches INTEREST. We considered only direct medical costs. Expenses for correction of the side effects caused hospitalization were counted on tariffs Compulsory Medical Service in St. Petersburg, 2013. Costs of compared medicines (Docetaxelum, Pemetrexed) were received from the database “Cursos”. RESULTS: Data of the research had shown that in case of an inefficacy of chemotherapy of the first line therapy, Gefitinib increased life expectancy in view of it's quality on 0,013 QALY and provide savings the 276 USD for a patient in comparison with original Docetaxelum. Costs for 1 month without pro-
gressing were 2,813 and 2,703 USD for Docetaxelum and Gefitinibim respectively. Cost of 1 treatment course (21 Days) of Paclitaxel were in 1.9 times higher than Gefitinibim. Therapy with Gefitinibim increase of life expectancy on 6 months and on 0,226 QALY in comparison with Permetrexed. Costs of 1 month without progression for Gefitinibim were in average 1,8 times less (2 699 and 5 016 USD for Gefitinibim and Permetrexed respectively). Therapy with Gefitinibim allows to decrease the direct medical costs on 19%. CONCLUSIONS: Therapy with Gefitinibim as the second line therapy in patients with non-small cell lung cancer is effective from clinical and economical point of view.

PCN197
THE IMPACT OF PHARMACEUTICAL INNOVATION ON PREMATURE CANCER MORTALITY IN PORTUGAL
Lichtenberg F1, Laires P2
1Columbia University, New York, NY, USA, 2Merck Sharp & Dohme, Oeiras, Portugal
OBJECTIVES: The number of cancer survivors is growing due to progression in diagnosis and treatment. Approximately half of cancer survivors are at working age, diagnosis and treatment. One of the reasons is a disability of this study was to estimate potential savings to EU economy due to return to work of disabled cancer survivors.

PCN198 CANCER AND PREMATURE MORTALITY IN IRELAND: AN EMPLOYER’S PERSPECTIVE FOLLOWING THE FRICITION COST APPROACH
Hanly P1, Pearce A2, Sharpe J3
1National College of Art and Design, Dublin, Ireland, 2National Cancer Registry Ireland, Cork, Ireland, 3Neuchatel University, Neuchatel, UK
OBJECTIVES: Cancer is the second leading cause of death in Ireland accounting for approximately 30% of all deaths. Of these, almost a third arise in those of working age. As well as the public health burden, cancer also imposes economic costs on society in general and employers in particular. This study measured the productivity costs associated with cancer-related premature mortality from an employer’s perspective. METHODS: Data was abstracted on the average annual number of cancer deaths between the ages of 15 and 64 in Ireland during 2005-2009 by 5-year age groups and sex from the World Health Organization Cancer Mortality Database. The base-case cost per life-year lost was used to value all premature cancer deaths (and those for the ten most common cancer sites in males and females), over a defined friction period (base-case = 79 days), by gross gender- and age-specific wages, adjusted for labour market characteristics. In sensitive scenario analysis, all potential effects were considered. RESULTS: Employers are becoming increasingly aware of the adverse economic effects of illness. The study evaluated a randomly selected cohort of patients from Inovalon’s MORE2Research Edition claims database that includes longitudinal data from US health plans. Patients who received AC regimens on first day of each cycle in first line of therapy during the last six months of 2013 were included. Total CINV events and CINV related and total hospital/EH visits were captured for cycles of interest in first line and were analyzed using chi-square to determine statistical differences between patients on NK-1 and non-NK-1 regimens. RESULTS: The study cohort consisted of 353 patients, 97% female, 60% with Commercial insurance, and 95% with breast cancer, with mean age of 53.1 and Charlson comorbidity score of 0.6. NK based CINV regimens were utilized in 7% of patients in the first chemotherapy cycle. Rescue anti-emetics were used by 53% of patients on NK-1 regimens versus 60% of patients on non-NK-1 regimens. Frequency of CINV events was 41% for NK-1 versus 45% for the non NK-1 group. Frequency of CINV related EH visits was 5% in the NK-1 group versus 12% in the non NK-1 group, p=0.03. NK related hospitalizations were 3% in the NK-1 group versus 4% in the non-NK-1 group. Total EH visits were lower in the NK-1 group compared to the non-NK-1 group, 12% versus 19%, respectively. CONCLUSIONS: NK based chemotherapy regimens were associated with lower CINV events and related resource utilization, with CINV related EH visits statistically lower. Further studies are warranted to determine if results are generalizable to other cancer regimens and diagnoses.