gressing were 2 813 and 2 703 USD for Docetaxelum and Gefitinibum, respectively. Costs of 1 treatment course (21 days) of Pemetrexed were in 1,9 times higher than Gefitinibum. Therapy with Gefitinibum increase of life expectancy on 6 months and on 0,226 QALY in comparison with Pemetrexed. Costs of 1 month without progression for Gefitinib were in average 1,8 times less (2 699 and 5 016 USD for Gefitinib and Pemetrexed, respectively). Therapy with Gifinitib allows to decrease the direct medical costs on 19%. **CONCLUSIONS:** Therapy with Gifinitib 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
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OBJECTIVES: Reducing premature mortality is a crucial public health objective. A widely used measure of premature mortality is years of potential life lost before a given age (e.g. age 80). The aim of this study was to analyze the effect that pharmaceutical innovation had on premature cancer mortality in Portugal during the period 2002-2010. **METHODS:** The analysis was performed by using a difference-in-differences research design based on longitudinal disease-level data, in order to investigate whether the diseases that had a larger increase in the number of new available drugs (i.e. more pharmaceutical innovation) had larger declines in years of potential life lost before age 80 in Portugal. Herein, we present the results specific for cancer disease. This methodology controls for the effects of macroeconomic trends and overall changes in the healthcare system. Official databases were used, such as the Eurostat for the premature mortality data. **RESULTS:** Drugs registered during the period 1994-2002 reduced the number of years of potential life lost to cancer before age 80 in 2010 by 26,645. The estimates indicate that if no drugs had been registered during 1994-2002, premature mortality from cancer would have increased by about 9%. The 2010 expenditure on cancer drugs registered during 1994-2002 in Portugal was € 148,670,718. Thus, the estimated cost per life-year before age 80 gained from previous pharmaceutical innovation was €5,580 (reduction in hospital costs due to the impact of pharmaceutical innovation on cancer morbidity were not accounted). **CONCLUSIONS:** These findings indicate that pharmaceutical innovation contributed with a significant reduction in the premature mortality caused by cancer in Portugal. Moreover, the estimated cost per life-year is well below even the lowest estimates of the value of a life-year saved.

PCN198
CANCER AND PREMATURE MORTALITY IN IRELAND: AN EMPLOYER'S PERSPECTIVE FOLLOWING THE FRICTION COST APPROACH
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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 in Ireland. **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 group and sex from the World Health Organization Cancer Mortality Database. The friction cost approach 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 sensitivity analyses estimates were adjusted for 'multiplier effects' associated with modern work practices and for changing labour market conditions. **RESULTS:** The all-cancer premature mortality cost was €14.3 million in 2009. Costs were more than two-fold higher for males than females. Base-case estimates were sensitive to changes in labour markets conditions and decreased by 42% following adjustment for increased unemployment levels (from 4.6% to 12.7%). Productivity costs were higher in settings with modern team-based working practices rising by almost 30% in the case of females (17% for males). **CONCLUSIONS:** Employers are becoming increasingly aware of the adverse economic effects of illness. Our results reveal the magnitude of productivity costs associated with cancer-related premature mortality from an employer's perspective in Ireland. These results provide a sense of the types and magnitude of costs that are explicitly excluded from economic evaluations that fail to encompass a broader social perspective.

PCN199
POTENTIAL SAVINGS TO EU ECONOMY DUE TO RETURNING TO WORK OF CANCER SURVIVORS WITH A DISABILITY
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OBJECTIVES: The number of cancer survivors is growing due to progression in diagnosis and treatment. Approximately half of cancer survivors are at working age, however many of them do not return to work. One of the reasons is a disability of cancer survivors. Although cancer related disability is usually more severe compared to disability due to other diseases, real-life data showed up to 85% of disabled cancer survivors may return to work after comprehensive rehabilitation programs. The aim of this study was to estimate potential savings to EU economy due to return to work of disabled cancer survivors. **METHODS:** Data on indirect cost of a cancer related disability were calculated based on Luengo-Fernandez at al. study and our own estimation of a contribution of disability to indirect cost related to morbidity. Disability structure i.e. percentage of a partially disabled cancer survivors, was adopted from Polish Social Insurance Institution data (we assumed that population with complete disability or inability for independent existence can't return to work). Presenteeism and absenteeism in cancer survivors were adopted from our previously published studies. **RESULTS:** We estimated the indirect cost of cancer due to disability in EU at the amount of 4223.2 million EUR. However partial disability account for approx. 20-25% of this sum and reduces potential savings to the amount of 844.6–1055.8 million EUR. Further correction, taking into account the efficacy of rehabilitation programs (up to 85%), reduces this savings to 717.9–897.4 million EUR. Considering the loss of productivity due to sickness absence and presenteeism measured in cancer survivors' population (19.1% and 37.3% respectively) potential savings for EU economy due to return to work of cancer survivors with a disability are calculated at the amount of 364.2-455.2 million EUR. **CONCLUSIONS:** Indirect cost of cancer related disability can be reduced, but probably only to a small extent.

PCN200
PREDICTING FUTURE NEED OF RESOURCES FOR ADENOMA SURVEILLANCE FROM A POPULATION-BASED COLORECTAL CANCER SCREENING PROGRAM THROUGH DISCRETE EVENT SIMULATION
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OBJECTIVES: European guidelines recommend colorectal cancer screening of average-risk population. Besides cancer, adenomas deserving surveillance through colonoscopy, are found. Our objective was to estimate the resources needed to undergo the recommended surveillance of adenomas found under a population-based colorectal cancer screening program. **METHODS:** A previous discrete-event simulation model representing a colorectal cancer screening program for a target population of women and men aged 50-69 was used. The underlying conceptual model was based on the European Guidelines for both the screening process and follow-up after adenoma removal. Resources needed according to findings of the colonoscopy at screening were the following: genetic tests for polyposis; high-complexity colonoscopies for high-risk adenomas and polyposis, non-complex colonoscopies for intermediate-risk adenomas; visits with gastroenterologists for high-risk adenomas and polyposis and with general practitioners for intermediate-risk adenomas. Parameters were estimated from the Colorectal Cancer Screening Program of Barcelona and follow-up colonoscopy results from the literature. A 20-year horizon starting in 2015 was simulated. The model included population's ageing. Results were rescaled to the population of the whole territory (1.7 million target population). **RESULTS:** The predicted number of colonoscopies at screening was 19,275, 18,829 and 20,988 for years 2015, 2024 and 2034, respectively. The predicted numbers of non-complex and high-complexity colonoscopies were 9,887 and 7,760 in 2024 and 14,362 and 9,099 in 2034, respectively. The expected number of gastroenterologist and general practitioner visits were 9,137 and 15,154 in 2024 and 10,494 and 19,989 in 2034, respectively. The number of genetic tests was 545 and 659 for years 2024 and 2034, respectively. **CONCLUSIONS:** Implementing a population-based colorectal cancer screening program represents an increased demand of resources for surveillance of intermediate and high-risk adenomas found under the program. Results of the simulation model will allow distributing the resources geographically and predicting future need when the screening program is extended to all the territory.

PCN201
EVALUATION OF RESOURCE UTILIZATON FOR CHEMOTHERAPY INDUCED NAUSEA AND VOMITING (CINV) IN PATIENTS TREATED WITH ANTHRACYCLINE+CYCLOPHOSPHAMIDE (AC) FOR SOLID CANCERS WITH AND WITHOUT NK-1 BASED REGIMENS
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OBJECTIVES: This study assesses frequency of CINV events and resource utilization in patients treated with AC for solid cancers **METHODS:** 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 last six months of 2013 were included. Total CINV events and CINV related and total hospital/ER 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 regimens 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 6.0. NK-1 based CINV regimens were utilized in 73% of the 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 ER visits was 5% in the NK-1 group versus 12% in the non NK-1 group, p=0.03. CINV related hospitalizations were 3% in the NK-1 group versus 4% in the non-NK-1 group. Total ER visits were lower in the NK-1 group compared to the non NK-1 group, 12% versus 19%; total hospitalizations were also lower in the NK-1 group compared to the non NK-1 group, 8% versus 13%. **CONCLUSIONS:** For patients on highly emetogenic AC based chemotherapy regimens, NK-1 treatments result in decreased rates of CINV events and resource utilization, with CINV related ER visits statistically lower. Further studies are warranted to determine if results are generalizable to other cancer regimens and diagnoses.

PCN202
RESOURCE UTILIZATION IN PATIENTS WITH ADVANCED MELANOMA IN FRANCE
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