elevated liver enzymes, while dabrafenib was most often associated with CSCC and pyrexia. The most common AEs associated with trametinib were hypertension and rash. Common ilipilumab AEs included immune-related diarrhea/colitis, dyspnea, anemia, vomiting, and less frequently, hypophysis. In the outpatient setting, the most costly AEs per incident included anemia ($4,643, $449, $121), 11 NS, ES, IT, Febrile neutropenia ($593, $430, IT, ES) and CSCC ($483, $292, ES, IT). In the inpatient setting, the most costly AEs per hospitalization per country were hypophysis ($10,189, ES), elevated liver enzymes ($6,628, FR), anemia ($2,026, $2,628, NL, IT). Additional inpatient treatments with high costs were diarrhea ($4,083, ES), neutropenia ($2,322, IT) and vomiting ($2,063, NL). CONCLUSIONS: Costs of managing AEs can be substantial, and effective new treatments with reduced AE profiles would be valuable.

PCN80 THE COST OF TREATING SQUAMOUS CELL CARCINOMA OF THE ANUS (SCCA) IN ENGLAND: RESULTS FROM AN EMPIRICALLY CALIBRATED MODEL
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OBJECTIVES: Squamous cell carcinoma of the anus (SCCA) generally requires a number of complex interventions as part of a multidisciplinary approach to treatment. This research aimed to combine available data on disease progression and treatment in order to estimate the average cost of treating a case of SCCA in England. METHODS: Data on primary treatment, disease progression and follow-up were obtained from the Association of Coloproctology of Great Britain and Ireland’s anal cancer position statement, supplemented by expert opinion where necessary. First, a Markov model was constructed to estimate the costs of diagnosis, staging and primary treatment. A Markov model was then developed to simulate disease progression and follow-up based on the mode of primary treatment (combined modality or radiotherapy alone). Values for the utilities of patients were directly estimated using the EuroQol EQ-5D, and to treatments and interventions were taken from the 2010/11 National Tariff, with the 2010/11 Reference Costs used for off tariff payments. A one-way sensitivity analysis was also performed. RESULTS: The cost of treating a case of SCCA was estimated at £10,189, the expected range of £16,748-£16,030 when future inflation was taken into account, and £16,278-£16,455 when it was not. In the one-way sensitivity analysis, the adjusted value ranged between £14,309-£23,264 (unadjusted £14,139-£23,077), with the results most sensitive to changes in the mode of admission for primary treatment and the costs of staging/diagnosis. CONCLUSIONS: Despite limitations in the approach resulting from a lack of available data, these results indicate that the cost of treating SCCA is significant. Further observational work is required in order to verify these findings.

PCN81 ECONOMIC BURDEN OF TOXICITIES ASSOCIATED WITH ADVANCED MELANOMA TREATMENTS IN THE UNITED STATES
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OBJECTIVES: Information on the costs of managing adverse events (AEs) associated with currently-available treatment regimens in advanced melanoma is limited. This study aimed to estimate the incremental costs related AEs associated with anti-PD-1/PD-L1 therapies. A proposed innovative biomarker. Demographic and patient behavior information, disease related data on incidence as well as sensitivity and specificity of PSA, digital rectal examination and prostate biopsy were further supplemented to the model. Economic consequences were calculated by considering costs for examinations, biopsy diagnosis and complications. RESULTS: In Germany, annual screening would be recommended for 18.8 million men aged 45/50 years. A complementary biomarker of 80%, approximately 70% of prostate biopsies could be avoided. This could lead to a reduction of biopsy caused complications. Regarding the latter, means of 204.17€ were calculated. Due to prevented check-ups and biopsy complications, estimated costs would be reduced. The proposed biomarker will be relevant when applying a price of 48.50€. CONCLUSIONS: A complementary biomarker could lead to more precise diagnosis and additional value for patients and health insurance funds. Although the price may not be high, an implementation may nevertheless be feasible for companies due to the high number of examinations. Funded by the German Federal Ministry of Education and Research (BMBF) as part of the National Cluster of Excellence Medical Technology - Medical Valley EMM (Project grant No. 01EK1013B).

PCN83 RESOURCE USE AND COST OF DIAGNOSIS AND MANAGEMENT OF BREAST CANCER BY STAGE IN AN IRISH HOSPITAL EXPERIENCE
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OBJECTIVES: To estimate the cost of diagnostic investigation and treatment for breast cancer in an Irish teaching hospital from a health payer perspective. METHODS: Retrospective population based resource utilization data for 616 patients who had undergone breast cancer in a university teaching hospital in Ireland were available for the period 2009-2011. Health care resource use included diagnostic investigations and all treatments. Unit costs for diagnosis & surgical procedures, laboratory tests, and radiotherapy were derived from DRG costs, hospital finance departments, clinical opinion and literature review. Chemotherapy costs were estimated from local hospital protocols, pharmacy departments and clinical opinion. Associated pharmaceutical cost, including oral hormonal therapy, were estimated from the HSE Primary Care Reimbursement Service. All and mean costs by stage of breast cancer are presented with bootstrap 95% confidence intervals (CIs). RESULTS: Total cost of diagnosis, treatment and follow-up was estimated at €33.5 million over the 3 year period, with an average cost of €24,863 per patient (95% CI, €22,628, €27,197). Chemotherapy and other pharmaceuticals accounted for 47%, radiotherapy 19%, surgery 19%, diagnostics 5%, radiotherapy 2% and follow-up 8% of total expenditure. The biological agent trastuzumab accounted for 13% of the pharmaceuticals costs. Costs varied by stage of cancer treated. The average cost per patient by stage at diagnosis was estimated as follows; Stage 1 (n = 186) €32,821 (95% CI; €20,113, €72,846), Stage 2 (n=248) €24,919 (95% CI; €21,358, €28,480), Stage 3 (n=123) €30,172 (95% CI; €25,434, €35,366), Stage 4 (n=56) €16,570 (95% CI; 96,764, €25,836). CONCLUSIONS: This study demonstrates the value of using existing data from national and local databases in estimating the cost of diagnosis and management of breast cancer from a health payer perspective and highlights the impact of trastuzumab on overall costs.

PCN84 ANALYSIS OF PUBLIC AND PRIVATE HOSPITAL DATABASES (PMS) 2010 / 2011 TO ESTIMATE THE FREQUENCY AND ASSOCIATED COSTS FOR FEBRILE NEUTROPHILIA IN FRANCE
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OBJECTIVES: To estimate the frequency and costs of hospital stays for cancer patients receiving cytotoxic chemotherapy including febrile neutropenia (FN), in public and private hospitals in France. METHODS: The French Hospital National Database (PMS) is a comprehensive claims database which includes information on diagnoses and procedures and allows record linkage. Hospital stays for patients admitted with hematologic or solid tumors in 2010/2011 were extracted and an ad hoc algorithm selected those for which the primary admission reason was FN, as well as those due to an infectious syndrome resulting from FN. Economic valuations were based on 2010 public national tariffs and National Scale Costs (ENCO). RESULTS: A total of 14,685 hospital stays were analyzed (3,776 stays for the treatment of hematologic tumors and 10,909 for solid tumors) corresponding to 10,721 patients treated for FN (2,368 patients were included in each database, considered, and there is need for effective treatments with improved toxicity profiles).

PCN82 HEALTH ECONOMIC EVALUATION OF A COMPLEMENTARY BIOMARKER FOR HYPOTHETICAL PROSTATE CANCER SCREENING IN GERMANY
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OBJECTIVES: Prostate cancer (PCA) is the most common cancer in men worldwide; however, the benefits of existing screening programs are limited. This is mainly due to low specificity of currently utilized biomarkers. This can lead to both inappropriate medical treatment and increasing costs of care. For the future, many biotechnological developments are promising, but not all will be affordable for the healthcare system. As a tool to arm the patient with prostate-specific antigens (PSA)-test may cost which would be applied to avoid biopsy-negative results. METHODS: Conduct of a hybrid discrete-event and system-dynamics simulation model including applying Hypo3D and expert knowledge, a hypothetical PSA screening workflow was developed and supplemented by a proposed innovative biomarker. Demographic and patient behavior information, disease related data on incidence as well as sensitivity and specificity of PSA, digital rectal examination and prostate biopsy were further supplemented to the model. Economic consequences were calculated by considering costs for examinations, biopsy diagnosis and complications. RESULTS: In Germany, annual screening would be recommended for 18.8 million men aged 45/50 years. A complementary biomarker of 80%, approximately 70% of prostate biopsies could be avoided. This could lead to a reduction of biopsy caused complications. Regarding the latter, means of 204.17€ were calculated. Due to prevented check-ups and biopsy complications, estimated costs would be reduced. The proposed biomarker will be relevant when applying a price of 48.50€. CONCLUSIONS: A complementary biomarker could lead to more precise diagnosis and additional value for patients and health insurance funds. Although the price may not be high, an implementation may nevertheless be feasible for companies due to the high number of examinations. Funded by the German Federal Ministry of Education and Research (BMBF) as part of the National Cluster of Excellence Medical Technology - Medical Valley EMM (Project grant No. 01EK1013B).