prevalence data for 6 cancers with values ranging from < 3 to > 170 per 105were obtained from the GLOBOCAN database. Clinicaltrials.gov was searched for phase 3 trials for the cancers from 2005 to 2015; the NICE website was searched for technology appraisals concerning the cancers for the same period. **RESULTS:** Breast cancer (BC; prevalence, 174.1 per 105) had the greatest number of phase 3 clinical trials (n=333) and NICE assessments (n=10) in the period; three assessments resulted in recommendations. Prostate cancer (PC), having a similar prevalence to BC (162.5 per 105), had 60% fewer phase 3 trials (n=133) and 50% fewer NICE assessments (n=5), but also resulted in three recommendations. Multiple myeloma (MM; prevalence, 6.2 per 105) was the subject of a disproportionately high number of phase 3 trials (n=98) and NICE assessments (n=4); three assessments resulted in recommendations. In contrast, non-Hodgkin's lymphoma, having a higher prevalence than MM (15.4 per 105) was the subject of only 40 phase 3 trials and 4 NICE assessments; three resulted in recommendations. Myelofibrosis and pancreatic cancer, each having a prevalence of <5 per 105, were the subject of 11 and 25 phase 3 trials, respectively. One NICE assessment was performed for an intervention for myelofibrosis and had a negative outcome. **CONCLUSIONS:** These results suggest that while the number of NICE assessments undertaken reflects the number of phase 3 trials performed in a given cancer, there is a mismatch between the number of assessments and the prevalence of specific cancers in the UK. Further research is warranted to investigate whether a similar mismatch is evident in other countries.

PCN344

THE DUTCH MELANOMA TREATMENT REGISTRY AS BLUEPRINT FOR USING REGISTRY DATA TO IMPROVE HEALTH CARE DECISION MAKING

Franken M[1], Leeneman B[1], Schouwenburg M[2], Jochems A[3], Wouters M[4], Van den Eertwegh F[5], Haanen J[4], Van der Hoeven K[3], Uyl - de Groot C[1]

[1]*Institute for Medical Technology Assessment, Erasmus University, Rotterdam, The Netherlands,* [2]*Dutch Institute for Clinical Auditing, Deventer, The Netherlands,* [3]*Leiden University Medical Center, Leiden, The Netherlands,* [4]*Netherlands Cancer Institute, Amsterdam, The Netherlands,* [5]*VU University Medical Center, Amsterdam, The Netherlands*

OBJECTIVES: The Dutch minister of health made reimbursement of the first new melanoma drug conditional on the set-up of a population-based registry and centralisation of care. This led in 2012 to well-defined quality standards and the Dutch Melanoma Treatment Registry (DMTR) characterised by its unique collaboration between all stakeholders involved in melanoma care (public and private partnership). The DMTR aims to enhance real patient value by closing the gap of the initial uncertainty regarding the real-world value of promising drugs in everyday practice. **METHODS:** The DMTR prospectively documents detailed data of all Dutch advanced melanoma patients regarding tumour- and patient characteristics, treatment strategies, clinical, physical, social, emotional and well-being outcomes, resource use, informal care, and productivity losses. These data are used for benchmarking and outcomes research to obtain insights into real-world cost-effectiveness of treatment pathways to improve health decision making. **RESULTS:** The richness of DMTR data facilitates the assessment of multiple outcomes including quality of care, use of drugs, survival benefit, quality of life, costs and cost-effectiveness. Physicians are fortnightly provided with feedback on their delivered quality of care; manufacturers are provided with information regarding the use and performance of their drugs. This greatly enhances learning regarding the use and outcomes of treatments. First results (stage IV: N=1226; median follow-up 12.8 months) show an improved survival (2012-2015: median OS 9.3 months [IQR:4.5-17.4], one-year survival rate 40%) compared to the period before the introduction of the new drugs (2003-2011: median OS 6.8 months [IQR:3.3-18.5], one-year survival rate 33%). **CONCLUSIONS:** The DMTR provides crucial information regarding the extent to which novel treatments offer real-world value and whether scarce resources are spent cost-effectively in everyday practice. Its unique design emphasises the essential holistic view needed in cancer management and can be seen as blueprint for other registries aiming at improving health decision making.

PCN345

UPTAKE OF FILGRASTIM 'BIOSIMILARS' IN THE UNITED STATES: ANALYSIS OF A MEDICAL TRANSCRIPTION DATABASE OF PATIENT OFFICE VISITS

Smoyer KE[1], Jones CA[2], Lane PB[3]

[1]*Envision Pharma Group, Philadelphia, PA, USA,* [2]*Envision Pharma Group, London, UK,* [3]*Envision Pharma Group, Horsham, UK*

OBJECTIVES: Biosimilars of filgrastim (FIL), granulocyte colony-stimulating factor (G-CSF), have been available in Europe since 2008. Now 2 FIL products are approved in the USA: tbo-filgrastim (TBO-FIL, while a biosimilar in Europe, is not technically one in the USA; approved November 2013 for a subset of FIL indications) and filgrastim-sndz (FIL-SNDZ, the first true US biosimilar; approved March 2015, but launch delayed by ongoing litigation). Our objective was to identify physician documentation and use of TBO-FIL during patient office visits. **METHODS:** Physician records were extracted (1 November 2013–18 June 2015) from RealHealthData, a US medical transcription database providing data within 72 hours of each visit to a participating provider. Records were searched for mention of TBO-FIL: "tbo-filgrastim," "Granix," or "Neutroval." Mentions of FIL ("filgrastim" or "Neupogen") and PEG ("pegfilgrastim" or "Neulasta") were also tabulated. **RESULTS:** Counts of mentions (and number of unique prescribers) were as follows: PEG: 1864 (40); FIL: 431 (53); TBO-FIL: 5 (3), with >86% from oncologists in California. TBO-FIL was reported, as "Granix," for 4 patients. Prophylactic TBO-FIL was prescribed for 1 chemotherapy patient and as interim treatment for 2 patients with chemotherapy who normally received PEG. 1 patient reported taking TBO-FIL as needed for neutropenia symptoms. Only 1 of the 4 received TBO-FIL as their main G-CSF treatment. Counts will be refreshed in October 2015 and will include FIL-SNDZ data, if launched and available. **CONCLUSIONS:** Among 2300 records reporting a G-CSF in this snapshot of primarily Californian oncologists, only 5 mentions of TBO-FIL were noted in the 18 months since launch. As awareness of 'biosimilars' improves in the USA and legal barriers are overcome, it is expected that uptake of new FIL agents will increase. If the California data reflect national trends, uptake may continue to be slow compared with more established biosimilar markets in Europe.

PCN346

FRENCH PHYSICIAN SENSITIVITY TO AND CONSIDERATION OF THE COSTS OF CANCER TREATMENT

Chabernaud H, Flinois A, Bonnelye G

Kantar Health, Montrouge, France

Expenses for anticancer treatment in France have grown substantially with an average annual cost increase of 17.7% between 1999 and 2009. This is due to access to expensive targeted therapies, higher cancer incidence rates and overall survival in patients with advanced disease.**OBJECTIVES:** To evaluate physician opinions and attitudes and their evolution between 2003 and 2013 regarding the costs of anticancer treatments **METHODS:** Conducted in France biennially, the « Cancérologie » study measures physician opinions/attitudes on today's relevant topics. Latest waves of this study included a series of questions on the cost of anticancer treatments, allowing for analysis of the evolution of responses. In 2013 315 physicians who work in French public or private hospitals and prescribe antitumor treatments for solid and/or liquid cancer participate to the study. **RESULTS:** In 2003, 54% of physicians considered cancer related budgetary issues 'very important'. Over the years, this percentage progressively decreased until dropping to 25% in 2013. However, in 2003, 68% predicted that the budgetary situation would deteriorate further compared with 73% in 2013. The contrast between the pessimistic perceptions of the future and a reality which is perceived less and less problematic demonstrates the dual mindset of physicians who are at once: - Citizens conscious of how the growth of costs can only end in an impasse, - Clinicians whose prescriptions remain guided by therapeutic goals. Thus in 2013, 62% of physicians indicated that costs had little to no impact on their choice of treatment. **CONCLUSIONS:** New molecule availability will cause costs of anticancer therapies to continue to grow at the same rate seen in recent years. If physicians do not take greater responsibility for their prescriptions' costs, the only solution would be coercive measures.

PCN347

REVIEW OF THE CURRENT STATUS OF RAS MUTATION TESTING IN PATIENTS WITH METASTATIC COLORECTAL CANCER (MCRC): FLASH-RAS STUDY

Longin J

Merck Serono, LYON, France

OBJECTIVES: In 2013, it was shown that mutations in KRAS exons 3 and 4, or NRAS exons 2 to 4 had a similar effect. The primary objective was to assess the practices in conducting RAS testing in 2014. The secondary objectives were to describe the evolution of the RAS testing prescription rates from 2011, the process and time required to obtain the results, and to analyze their impact on the therapeutic strategy. **METHODS:** FLASH-RAS is an observational retrospective French multicenter study. **RESULTS:** 375 mCRC patients diagnosed and initiating a 1st line treatment (L1) between March and June 2014 were analyzed. For 90.1% of the patients (IC95%= [87.1%; 93.2%]), a genotyping request for RAS biomarkers was made in L1, i.e. a significantly increased rate compared to 2011 (81.1% in 2011, p<0.001). For 75% of the patients, the request was made before or at least one month after the diagnosis of the first metastases (1st M). No increase was observed in the median and mean times to obtain the test results between 2011 and 2014 despite the increased number of exons tested. **CONCLUSIONS:** In 2014, the rate of RAS genotyping requests has been increasing since 2011. For a majority of patients, the request is made before or at the latest one month after 1st M diagnosis. Nevertheless, for 24.5% of the patients, the request is made more than one month after 1st M diagnosis, which is not compatible with an informed treatment decision in L1.

PCN348

EVALUATION OF PATIENT-CENTERED CARE IN SHORT-TERM CANCER SURVIVORS, THROUGH THE PATIENT ASSESSMENT OF CHRONIC ILLNESS CARE QUESTIONNAIRE

Escobar A[1], Perez-Ruiz E[2], Rueda A[2], Trujillo-MartinMd [3], Trancho Z[4]

[1]*Basurto University Hospital (Osakidetza) - REDISSEC, Bilbao, Spain,* [2]*Agencia Sanitaria Costa del Sol. REDISSEC, Marbella, Spain,* [3]*Servicio de Evaluación y Planificación. REDISSEC, Tenerife, Spain,* [4]*Hospital Universitario Basurto. REDISSEC, Bilbao, Spain*

OBJECTIVES: The Chronic Care Model (CCM) is an accepted framework for delivering care to patients with chronic illnesses. The Patient Assessment of Chronic Illness Care (PACIC) is a questionnaire designed to assess the CCM from the patient´s perspective, focusing on the receipt of patient centered care. Our aim was to document patient´s assessment of chronic illness care in short-term cancer survivors, through PACIC **METHODS:** Patients with colo-rectal (CCR), breast or prostate cancer and who finished their treatment three years before answering the questionnaire were included in the study. PACIC was administered by mail and has 5 subscales, patient activation (PA), delivery system design (DSD), goal setting (GS), problem solving (PS) and follow-up coordination (FU). In addition there is a global score (G). Each subscale and the global are scored from 1 to 5 with higher scores indicating patient´s perception of greater involvement in self- management and receipt of chronic care counseling. Data are expressed as mean (standard deviation). Comparison amongst location has been carried out through analysis of variance with Scheffé post-hoc test. PACIC has been validated in Spanish. **RESULTS:** There were 645 patients included, 139 prostate, 339 breast and 167 with CCR. The mean (SD) by dimensions were: PA: 3.2 (1.4), DSD: 3.5 (1.2), GS: 2.6 (1.3), PS: 2.8 (1.5), FU: 2.2 (1.2) and global: 2.8 (1.2). There were statistically significant differences amongst cancer location in two dimensions, PS (p= 0.02) and FU (p =0.002), with best scores in CCR in both cases. **CONCLUSIONS:** To our knowledge this is the first time that PACIC is used in cancer patients. Patient activation and delivery system design have shown the best scores and follow-up, a critical point the worst score although with differences; being CCR survivors who better have evaluated this dimension

PCN349

EVALUATION OF A PAYMENT BY RESULTS SCHEME IN A CATALAN CANCER CENTER: GEFINITIB IN EGFR MUTATION-POSITIVE ADVANCED NON-SMALL CELL LUNG CANCER

Simon S[1], Clopes A[2], Gasol-Boncompte M[3], Cajal R[4], Segu JL[5], Crespo R[2], Mora-Ripoll R[6], Cordero L[7], Calle C[2], Gilabert-Perramon A[8], Germa JR[9]

[1]*Astrazeneca Farmaceutica, S.A., Madrid, Spain,* [2]*Institut Catala d'Oncologia, Barcelona, Spain,* [3]*CatSalut, Barcelona, Spain,* [4]*AstraZeneca Spain, Madrid, Spain,* [5]*Oblikue Consulting, Barcelona, Spain,* [6]*CatSalut, Catalan Health Service, Barcelona, Spain,* [7]*Astrazeneca, Madrid, Spain,* [8]*Government of Catalonia, Barcelona, Spain,* [9]*Institu Catala D'Oncologia, Hospitalet de Llobregat, Barcelona, Spain*

OBJECTIVES: To evaluate the economic results of this PbR compared to a traditional purchasing model and determine the perception of the stakeholders involved in the agreement. In healthcare systems, incentive-based schemes generally called payment-by-results schemes (PbR), which dynamically link the price of innovation to the usage conditions are alternatives to traditional fixed payment schemes. In 2011, the first PbR in Catalonia was signed between the Catalan Institute of Oncology, the Catalan Health Service and AstraZeneca (AZ) for the introduction of gefitinib in the treatment of EGFR-mutation positive advanced non-small-cell lung cancer. **METHODS:** Economic analysis of the differential costs between two scenarios, one including the total cost of treatment and the PbR scenario where AZ reimbursed the treatment according to previously agreed terms. 41 patients were included from June 2011 to October 2013 and assessed at two evaluation points. At week 8, responses, stabilization and progression were evaluated and at week 16 stabilization was confirmed. AZ was to reimburse the total cost of treatment of those patients that failed the treatment. A qualitative research of the organizational elements was done by interviewing the parties involved in the contract **RESULTS:** The difference in cost of gefinitib using the PbR compared to the traditional purchasing scenario was 6.17% less at 8 weeks, 11.18% at 16 weeks and 4.15% less for the overall treatment. The PbR resulted in total savings of around € 36,000, which corresponds to approximately € 1,000 per patient. From an operational and organizational perspective, the availability of adequate information systems to measure outcomes and monitor accountability and the involvement of healthcare professionals were acknowledged as crucial. **CONCLUSIONS:** The parties have identified tangible and intangible benefits with respect to the interests of the parties involved. This has led to the incorporation of innovation for patients under acceptable conditions.

PCN350

EXPLORING BEFORE AND AFTER RISK-SHARING SCHEME IMPLEMENTATION DURING 8.5 YEARS FOCUSED ON ANTICANCER DRUGS

Chae JY, Park HK, So SM

Health Insurance Review & Assessment Service (HIRA), Seoul, South Korea

OBJECTIVES: Risk-sharing scheme (RSS) has been implemented since Nov 2013 as part of policies to increase patients' accessibility in Korea. This study aimed to compare the impact of reimbursement rate before and after the implementation of RSS especially in anticancer drugs and to review the characteristics of the anticancer drugs on risk-sharing agreement (RSA). **METHODS:** Reviewed appraisal results for anticancer drugs in HIRA Drug Reimbursement Assessment Committee from 2007 to Jun 2015. The rate of reimbursement recommendation before and after RSS implementation and the proportion of RSA after RSS implementation were assessed. Drugs recommended after RSS implementation were classified into comparative clinical effectiveness-superior, non-inferior, similar- and cost effectiveness-assessed by economic analysis or weighted average price. From each category, the proportion of RSA drug and type of scheme were counted. **RESULTS:** During 8.5 years, total 86 appraisals of anticancer drugs, the reimbursement recommendation rate was 58.1%(50/86). The reimbursement recommendation rate was 55.4%(31/56) before RSS implementation and 63.3%(19/30) after RSS implementation. After RSS implementation, 19 appraisals of anticancer drugs were reimbursement, 10 of them were reimbursement on the condition of RSA (53%), and types of RSS were refund (100%). As for comparative clinical effectiveness of among 19 appraisals after RSS implementation, 16 were superior, 3 were silimilar to comparator. Among 'superior' group, 12 were assessed by economic analysis (CUA), 6 of them were on RSA (50%). The number of appraisals not assessed by economic analysis in superior group was 4, and they were on RSA. In 'similar' group, all were assessed by weighted average price and none of them were on RSA. **CONCLUSIONS:** The implementation of RSS seemed to contribute to increase patients' accessibility to new anticancer drugs. RSS can be a compensating way to decision-making for reimbursement of anticancer drugs which are clinically beneficial but having uncertainty in cost-effectiveness.

PCN351

ACCESS TO INNOVATION AND ECONOMIC BURDEN----A CASE OF NON-SMALL CELL LUNG CANCER IN A PATIENT ACCESS PROGRAM IN QINGDAO, CHINA

Chen W, Lin Y, Zhang L

Fudan University, Shanghai, China

OBJECTIVES: A patient access program (PAP) was adopted by local health insurance scheme in Qingdao since 2012 to provide the coverage of innovative products for catastrophic diseases including non-small cell lung cancer. This study aims to measure the impact of PAP on economic burden of the patients with non-small cell lung cancer. **METHODS:** The patients with non-small cell lung cancer during 2008 and 2013 were identified from health insurance information system. All claims data, including total treatment fees, the composition and the out-of-pocket fees born by the patients, were collected and a comparative analysis before and after the PAP implementation was conducted. **RESULTS:** The PAP was achieved through price negotiation between local health insurance agent and manufacturers and reimbursed 70% of the cost of PAP-covered innovative medicines including Icotinib for non-small cell lung cancer. Totally 299 new patients with non-small cell lung cancer registered in PAP and another 78 patients were identified to switch from routine chemotherapies into Icotinib regimen. Before PAP, the average monthly treatment fees under the routine continuous chemotherapies were RMB11,333 (USD1,828) per patient, with 34.8% (RMB3,939) born by the patient out-of-pocket. Under PAP, for the same patient group, the patients monthly self-paid RMB4,519 (USD729) of the average fees for Icotinib and another RMB1,064 (USD172, 16.9% of total fees) for other drugs and routine treatment. **CONCLUSIONS:** The PAP, which provides the targeted patients the access to innovative medicines with better efficacy and safety, greatly decreased the fees on routine treatment, but also brought additional self-paid cost on PAP-covered medicines. Further researches are needed to help decision makers to make the tradeoff among better accessibility, increasing cost and improved outcomes from the clinical utilization of PAP-covered innovative medicines.

PCN352

PATIENT CHARACTERISTICS AND TREATMENT PATTERNS IN ER+/HER2- METASTATIC BREAST CANCER IN THE UK: RESULTS FROM A RETROSPECTIVE MEDICAL RECORD REVIEW

Kurosky S[1], Mitra D[2], Zanotti G[2], Kaye JA[3]

[1]*RTI Health Solutions, Research Triangle Park, NC, USA,* [2]*Pfizer, Inc., New York, NY, USA,* [3]*RTI Health Solutions, Waltham, MA, USA*

OBJECTIVES: To describe demographic and clinical characteristics and real-world treatment patterns for post-menopausal patients with ER+/HER2- metastatic breast cancer (MBC) in the United Kingdom (UK). **METHODS:** We conducted a retrospective review of medical records from institutions across the UK. Records were eligible for abstraction if patients were post-menopausal, had ER+/HER2- MBC (stage IV), and had discontinued second-line treatment in the metastatic setting between 1/1/2008 and 3/1/2014. Patients who participated in clinical trials were excluded. This study was considered a "Service Evaluation" by National Research Ethical Service guidance, thus ethics review was not required. Patient demographic, clinical characteristics and treatment patterns including time to progression (TTP) and treatment discontinuation were assessed. **RESULTS:** Forty-one medical/ clinical oncologists provided information for 209 patients. Patients were aged 62 years on average and predominantly Caucasian (87%), with 68% diagnosed in metastatic stage and 32% progressed from earlier stages. Bone was the most common site of metastasis (66%) followed by lung/pleura (50%), liver (41%), and lymph nodes (35%). In the first-line MBC setting, 49% of patients received endocrine therapy alone, 6% received it in combination with chemotherapy, 15% received it following chemotherapy induction, and 30% received chemotherapy alone. Chemotherapy usage increased in subsequent therapy lines (33% in second-line [n=209]; 53% in third-line [n=116]). Disease progression was the primary reason for discontinuing treatment in both first- and second-line (60% and 68% respectively). During first-line treatment, 86% progressed, with median TTP of 9.5 months. In second-line, 79% progressed, with median TTP of 7 months. **CONCLUSIONS:** Endocrine therapy and chemotherapy were commonly prescribed for ER+/HER2- MBC patients. Disease progression remains the most common reason for stopping/ changing therapies, with median TTP < 1 year. These findings suggest that there is a continuing unmet need for new treatments that can extend TTP and address the potential limitations of current therapies.

PCN353

CURRENT TREATMENT PATTERNS IN PATIENTS WITH METASTATIC MELANOMA: A RETROSPECTIVE CLAIMS DATABASE ANALYSIS IN THE UNITED STATES (US)

Chen Y[1], Ma Q[2], Hines DM[1], Zhao Z[2], Munakata J[3], Barber BL[2]

[1]*IMS Health, Fairfax, VA, USA,* [2]*Amgen Inc, Thousand Oaks, CA, USA,* [3]*IMS Health, San Francisco, CA, USA*

OBJECTIVES: To describe the real-world treatment patterns of current melanoma therapies among patients with metastatic melanoma in the US. **METHODS:** A retrospective cohort analysis was conducted using the IMS PharMetrics Plus claims database. Patients were included in the analysis if: ≥1 prescription for ipilimumab, vemurafenib, temozolomide, or dacarbazine between 1/1/2011-8/31/2013 (the date of the first use as the index date and the drug as the index drug); diagnosis of melanoma (ICD-9-CM 172.x, V10.82) and metastasis (ICD-9-CM 196.x-198.x) before the index date (pre-index); no index drug use pre-index date; continuous health plan enrollment for ≥6 months before and ≥3 months after the index date; age ≥18 years. Treatment duration was assessed from the index date until a gap in days supplied for >90 days, or the end of follow-up, whichever came first. Proportion of days covered (PDC) was defined as days exposed to the index therapy divided by continuously-enrolled days between the index date and the last prescription date of the index drug. **RESULTS:** 1,043 patients with metastatic melanoma were included, with a median age of 57 years (43% ≤55 years), and 62% male. 405 patients received the index drug of ipilimumab, 361 vemurafenib, 203 temozolomide, and 74 dacarbazine. Mean (median) treatment duration with vemurafenib, temozolomide and dacarbazine was 174 (148), 100 (59) and 64 (52) days, respectively. Mean PDC with vemurafenib, temozolomide and dacarbazine was 81%, 67% and 51%, respectively. For patients receiving ipilimumab, 58% (234/405) had the full 4 doses, 20% (79/405) had 3 doses only, 14% (57/405) had 2 doses only, and 9% (35/405) had 1 dose only for the first treatment course; 4% (10/234) received re-treatment, and no patients had a second re-treatment. **CONCLUSIONS:** This study provides evidence of current treatment patterns of melanoma therapies, including newer agents, in the real-world clinical practice.

PCN354

TREATMENT PATTERNS AMONG FRONT-LINE GLIOBLASTOMA PATIENTS IN FIVE EUROPEAN COUNTRIES

Jiang S[1], Hill K[2], Patel D[1], Worthington K[2]

[1]*Pharmerit International, Bethesda, MD, USA,* [2]*Celldex Therapeutics, Hampton, NJ, USA*

OBJECTIVES: To characterize real-world treatment patterns among front-line patients with glioblastoma in Germany, France, Italy, UK, and Spain (EU-5). **METHODS:** This study used the oncologist-surveyed data from the IMS LifeLink™ Oncology Analyzer database. Front-line patients aged ≥ 20 years and diagnosed with glioblastoma during 2012 to 2014 in the EU-5 countries were included. Patient