effectiveness, it will be important to evaluate the value of new treatments against existing comparators based on clinical and health economic and outcomes research evidence. The purpose of this study is to provide a comparative review of the clinical, economic, and patient-reported outcomes for selected targeted late-stage NSCLC therapeutics and evaluate pharmacoeconomic trends. METHODS: Sixteen targeted therapies, currently approved or in late-stage clinical development, were identified for inclusion. A systematic review of peer-reviewed literature for Phase III studies and US pharmacoeconomic evaluations in support of these products was conducted using PubMed, relevant articles, and ancestral searches. To capture preliminary/future studies, conference proceedings from clinical and pharmacoeconomic research conferences were hand-searched. An extraction grid was built to record key comparable attributes of each study type (e.g., study origin, methods and results) and identify trends in health economic and outcomes results. RESULTS: We identified 70 original clinical, economic, or patient-reported outcomes evaluations that met the inclusion/exclusion criteria. Phase III trials showed that progression free survival (PFS) varied by 1–2 months across trials and most commonly reported adverse events varied, ranging from reports of pulmonary hemorrhage (bevacizumab) to rash and diarrhea (erlotinib and gefitinib). Few economic studies have been conducted in support of current treatments in the US; available studies have examined the cost-effectiveness of EGFR testing (erlotinib and gefitinib) and budget impact of adding new treatments to plan (erlotinib and pemetrexed). Inclusion of quality of life endpoints, e.g., lung cancer scale, FACT-L and EORTC) in trials is increasingly common. CONCLUSIONS: To date, few pharmacoeconomic evaluations have been published or presented at conferences in support of targeted NSCLC agents but current pharmacoeconomic platforms are useful for establishing future benchmarks for new entrants.

METHODS: To field test the EVIDEM framework applying multicriteria decision analysis (MCDA) to support health care decision making, with a private health care payer in South Africa. METHODS: MCDA begins with estimation of life years gained (LYG) and quality-adjusted life years (QALYs) for each drug. These values are then compared with those for other drugs, and integral analyses of resource allocation are performed. RESULTS: For cost-effectiveness thresholds £25,000–£32,000 per QALY, decisions about how best to improve care for mHRPC patients differ between the alternative analytic approaches. Based on sequential analysis, Mitoxantrone/Prednisone is determined cost-effective, without actively implementing this guidance. An integral analysis reveals that active implementation of Docetaxel+Prednisone (3 weekly) is the cost-effective option, yielding an additional 0.05 QALY per patient. By combining uncertain evidence on treatment regimens, their usage and active implementation, allowance is made for all uncertainty associated with resource allocation in mHRPC. CONCLUSIONS: For the analysis of the related decisions about 1) issuing, and 2) actively implementing clinical guidance, an integral approach is preferred over a sequential one. As the application of MCDA demonstrates, integral analysis provides better options for improving patient management, more comprehensive insight in decision uncertainty and, consequently, an efficient allocation of resources.
compared eight oral antineoplastics (capecitabine, imatinib, lamotrigine, thalidomide, misonidazole, etoposide, temozolomide, dasatinib) to a market basket of eight commonly utilized oral drugs (celexcoxib, statin, rosuvastatin, fenofibrate, ramipril, simvastatin, atorvastatin, alendropane). We calculated the correlation coefficient (r) for the relationships between a drug's average TACDE and its TRx. RESULTS: Two of the eight cancer drugs (etoposide and dasatinib) showed any remarkable correlations (r = 0.17 and 0.29, respectively) while the other six all had correlation coefficients less than 0.10. Five of the market basket drugs had a correlation coefficient greater than 0.10. Four of those had negative correlations between OPC and TRx: simvastatin (r² = 0.71), statin (r² = 0.64), alendropane (r² = 0.59), atorvastatin (r² = 0.14). Interestingly, ramipril had a significant positive correlation between OPC and TRx (r² = 0.51). CONCLUSIONS: Antineoplastic utilization appears to be inelastic with respect to OPC fluctuations via a vis the chosen market basket. This observation may be a function of the severity of disease, the lack of treatment options or both. In contrast, changes in OPC for products in the general market basket, notably simvastatin and statin, precipitated significant changes in drug utilization. Further treatment options and specifically generic competition may contribute to this finding. Future research is warranted to track these relationships in a prospective, multi-factorial manner in order to better infer a cause-effect relationship.

PCN151 CROSS-REGIONAL FLOWS OF CANCER PATIENTS IN GREECE: URBANIZATION OF CANCER TREATMENT

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OBJECTIVES: As an extension of our 2008 study, which demonstrated that clustering of oncology specific resources exceeded the spatial concentration pattern of cancer care in Greece, in 2011, in Greece, we analyzed trends and presented a systematic review and highlight the cross-regional flows of cancer patients to access adequate treatment.

METHODS: Patient admission and discharge data from public hospitals for the period 1999–2003 were collected on a regional basis from the National Statistical Service of Greece (NSS). Patients with a cancer diagnosis were grouped according to: a) place of residence and b) place of treatment for the 11 regions of Greece. RESULTS: A significant flow of patients was observed towards Attika, the largest urban center and capital of Greece, where the number of cancer patients treated exceeded the number of cancer patients residing in the region by 48.9%, per year, on average. The reverse (negative flow) was observed in Sterea, Ionia, Lassithi, Epirus, the Ionian Islands, Sthessaly and Thrace, the corresponding percentages being -76.2%, -63.3%, -45.2%, -37.3% and -27.9%, respectively. For the remaining 5 regions the flows did not exceed ±10%.

A further analysis based on type of cancer for the Attika region revealed that the highest flows, proportionally, according to diagnoses, were observed for melanoma, malignant and benign neoplasms of the uterus and Hodgkin’s disease, whereas the lowest for benign neoplasms of the skin, the urinary organs and the thyroid. CONCLUSIONS: Cross-regional flows of cancer patients to access adequate cancer treatment is in line with the geographical misdistribution of oncology-specific resources in favor of larger urban areas, especially Attika. A fair allocation of resources according to population distribution and cancer prevalence, as well as ongoing disease management programs at the place of residence, could greatly contribute to improved access to oncology services and minimize the socioeconomic burden to patients and their caregivers.

PCN152 NEW JAPANESE PREFECTURAL GOVERNMENT CANCER CONTROL PROGRAMS: A SYSTEMATIC REVIEW AND AN INTERNATIONAL COMPARISON

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OBJECTIVES: The Japanese Cancer Control Act took effect in 2007. The objectives of the Cancer Control Act are to improve regional cancer care and promote a uniform high level of cancer care nationwide. To achieve these goals, the Act specifies that all 47 prefectural governments in Japan formulate cancer control programs (CCPs) by 2008. Our study aimed to systematically review the CCPs of 45 of Japan’s prefectural governments that were formulated by January 2009 and then compare them to the programs that have been established in the West. METHODS: Six areas of the CCPs of 45 of Japan’s prefectural governments were systematically reviewed: “prevention,” “treatment,” and “palliative care,” etc. Parameters assessed included whether the proportion of smokers was being investigated, whether the numbers of radiation therapy and chemotherapy specialists engaged in cancer therapy were known, and whether the number of palliative care beds was known (a total of 224 parameters). RESULTS: The highest-rated plan overall received a score of 65.8, and the lowest a score of 35.3. Of the 45 plans, 21 (47%) established target values without parameters).

Interestingly, ramipril had a significant positive correlation between OPC and TRx (r² = 0.51). CONCLUSIONS: Antineoplastic utilization appears to be inelastic with respect to OPC fluctuations via a vis the chosen market basket. This observation may be a function of the severity of disease, the lack of treatment options or both. In contrast, changes in OPC for products in the general market basket, notably simvastatin and statin, precipitated significant changes in drug utilization. Further treatment options and specifically generic competition may contribute to this finding. Future research is warranted to track these relationships in a prospective, multi-factorial manner in order to better infer a cause-effect relationship.

PCN153 PERFORMANCE MONITORING OF ORGANIZED CANCER SCREENING PROGRAMMES USING ADMINISTRATIVE DATA

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OBJECTIVES: Cancer screening is essential component of national cancer control programmes. Screening programmes for breast, colorectal and cervical cancers are efficacious in decreasing cancer mortality and are recommended by the EU Council to all be effective, deliver adequate disease control, and increase anticancer drug use, and the United States' NCCCP has produced results highly regarded. Vital part of organized programme is performance monitoring employing data on all screening tests performed. In absence of dedicated data collection system, alternative ways of performance monitoring should be employed. Our objective is to demonstrate feasibility of performance monitoring using administrative data. METHODS: This was a cross-sectional study to ascertain coverage by cancer screening tests in Czech population in years 2000–2007. Administrative data from health insurance companies were collected by the National Reference Centre. Aggregated data were collected on procedures associated with cancer screening programmes, in particular screening mammography, FORB, and gynaecology preventive examination. RESULTS: Most reliable data from years 2006–2007 were used for coverage estimation. In the two-year period, 745,723 women aged 45–69 years (43.5 %) underwent mammography screening, compared to 754,147 records in dedicated breast cancer screening database. In the same period, 593,912 men and women over 50 years (16.0 %) underwent colorectal cancer screening. In 2007, gynaecology preventive examination was attended by 1,083,256 women (40.9 % of population aged 25–59 years). CONCLUSIONS: Performance monitoring using administrative data is feasible, which was demonstrated by using the screening test coverage. Concordance between administrative data and data in dedicated breast cancer screening database is excellent. Due to absence of actual data on population coverage in other screening programmes, administrative data is the only available and reliable source of information on access to programme by citizens in all regions. Future use of individual administrative data could help us to evaluate various other screening process components associated with its effectiveness, safety and cost-effectiveness.

PCN154 ANTICANCER DRUG EXPENDITURE IN CATALONIA 2003–2007

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OBJECTIVES: The cost of cancer drug treatment continues to increase, especially with the addition of monoclonal antibodies and other targeted therapies to standard cancer treatment regimens. The purpose of this study was to examine the pharmacoeconomic expenditure growth in anticancer drugs in Catalonia between 2003 and 2007.

METHODS: Data from the Pharmaceutical Care and Complementary Benefits database from the Catalan Health Service was used. This database contains information on all drugs dispensed in the outpatient setting in public hospitals. Drug expenditure was not adjusted for inflation and results are expressed in nominal terms. RESULTS: From 2003 to 2007, total drug expenditure (TDE) grew at an average annual rate of 13.4%. During this period mean average growth rate for total anticancer drug expenditure (TACDE) was 46.1% increasing from 24.8 million Euros in 2003 to €111.6 million in 2007. TACDE as percentage of TDE increased over the 5-year period from 9% in 2003 to 22.6% in 2007. Considerable variation in growth of TACDE was observed across regions and hospitals. Six drugs (trastuzumab, imatinib, docetaxel, oxaliplatin, rituximab and paclitaxel) accounted for 67% of TACDE. The number of patients receiving anticancer drugs and the number of dispensed drugs increased by 29.13% and 34.2%, respectively. PER patient anticancer drug expenditure increased from €3,896/patient in 2003 and €6,220/patient in 2007. Information in diagnosis was not available and analyses per type of cancer could not be performed. CONCLUSIONS: Anti-cancer drug expenditure in the outpatient setting has been increasingly growing during the study period. Both the volume of drug use and the entry of new drugs (typically introduced to the market at higher prices) seem to be explanatory factors determining drug spending trends in Catalonia. A more comprehensive approach to the use of anticancer drugs by type of cancer is of high importance.

PCN155 “PATIENT ACCESS SCHEMES”—THE USE OF RISK-SHARING IN THE UK

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OBJECTIVES: To analyse key differences between the recently negotiated Pharmaceutical Price Regulation Scheme (PPRS) and previous schemes. Understanding the implications of these changes is important for the pharmaceutical industry and pricing and reimbursement (P&R) activities, particularly when considering the application of risk-sharing. METHODS: The new and old versions of the PPRS were compared across several dimensions: 1) price cuts; 2) price and profit controls; 3) new initiatives and 4) incentives. In particular, the recent introduction of “patient access schemes” (PASs) was examined. Recent risk-sharing agreements (Veklue and Lucande) were presented as case studies. To provide an international perspective and cross-market comparison, the analysis also considered examples of risk-sharing schemes as used in...