very low costs or even no medical attention, and therefore were not taken into account. Data sources included the published incidence rates for the 25 most frequent AE in controlled clinical trials with BEV + IFN or sunitinib. a panel integrated by 10 local experts from different specialties was constituted to estimate medical and nonmedical resource use for diagnosis and treatment of each AE grade 3/4. Cost of medications involved in treating AE were taken from public bids and unit cost of medical services (outpatient medical consultations, laboratory and image tests, hospitalization at general ward and at intensive care unit, surgical and nonsurgical procedures, etc.) was gathered from official tariff lists. All costs are expressed in 2009 Mexican pesos (MXN). **RESULTS:** The average cost per patient for the management of grade 3/4 AE were 76.5% higher for sunitinib ($17,577) than those for BEV + IFN ($9959). The main cost drivers for sunitinib were hypertension, heart failure, and non-febrile neutropenia; for BEV + IFN, main cost drivers included proteinuria and arterial and venous thromboembolic events. **CONCLUSIONS:** BEV + IFN has a more tolerable AE profile when compared to sunitinib, which is also reflected in the nearly double cost for managing AE with sunitinib in patients with mRCC.

PCN43

COST COMPARISON OF ERLOTINIB VERSUS PEMETREXED FOR THE FIRST-LINE MAINTENANCE TREATMENT OF PATIENTS WITH LOCALLY ADVANCED OR METASTATIC NON-SMALL CELL LUNG CANCER IN ITALY

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OBJECTIVES: First-line chemotherapy for locally advanced or metastatic non-small cell lung cancer (mNSCLC) is usually limited to four to six cycles, as prolonged exposure leads to cumulative toxicity without additional survival benefit. Maintenance therapy represents a new treatment option which can delay disease progression and extend survival in patients with mNSCLC. Erlotinib and pemetrexed are currently the only treatments specifically approved for this indication by the European Medicines Agency and US Food and Drug Administration; therefore, it is important to compare the monthly treatment costs of using erlotinib or pemetrexed for the maintenance therapy of patients with mNSCLC. **METHODS:** Italian monthly treatment costs were calculated as the sum of the ex-factory costs for the average dose (erlotinib = 150 mg/day, pemetrexed = 500 mg/m^2) over a 30-day treatment duration plus administration costs. Monthly administration costs were derived from regional tariffs for oncology drugs. **RESULTS:** Monthly drug costs for erlotinib maintenance therapy are lower than for pemetrexed (€1517 vs. €2770, respectively). In addition, as an intravenous treatment, pemetrexed is associated with additional costs related to administration (estimated at €140 per month), whereas orally administered erlotinib is not associated with any administration costs. Pemetrexed total monthly treatment costs are therefore €2910, €1393 higher than erlotinib total monthly treatment costs. The cost saving associated with erlotinib would allow approximately 92% more patients to be treated with erlotinib maintenance therapy, based on a fixed health-care budget. Furthermore, it is anticipated that the management of pemetrexed-related adverse events (e.g., neutropenia, anaemia) would be more costly than those related to erlotinib use (e.g., rash, pruritus). Therefore, the cost saving when using erlotinib versus pemetrexed for first-line maintenance therapy may be greater in a real-world setting. **CONCLUSIONS:** Based on Italian costs, erlotinib is a cost-saving treatment option compared with pemetrexed, for the first-line maintenance therapy of patients with locally advanced or mNSCLC.

PCN44

COST COMPARISON OF ERLOTINIB VERSUS PEMETREXED FOR THE FIRST-LINE MAINTENANCE TREATMENT OF PATIENTS WITH LOCALLY ADVANCED OR METASTATIC NON-SMALL CELL LUNG CANCER IN SPAIN

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OBJECTIVES: First-line chemotherapy for locally advanced or metastatic non-small cell lung cancer (mNSCLC) is usually limited to four to six cycles, as prolonged exposure leads to cumulative toxicity without additional survival benefit. Maintenance therapy represents a new treatment option which can delay disease progression and extend survival in patients with mNSCLC. Erlotinib and pemetrexed are currently the only treatments specifically approved for this indication by the European Medicines Agency and US Food and Drug Administration; therefore, it is important to compare the monthly treatment costs of using erlotinib or pemetrexed for the maintenance therapy of patients with mNSCLC. **METHODS:** Spanish monthly treatment costs were calculated as the sum of the ex-factory costs for the average dose (erlotinib = 150 mg/day, pemetrexed = 500 mg/m^2) over a 30-day treatment duration plus administration costs. Monthly administration costs were obtained from regional tariffs (Galician Health Service). **RESULTS:** Monthly drug costs for erlotinib maintenance therapy are lower than for pemetrexed (€2045 vs. €2914, respectively). In addition, as an intravenous treatment, pemetrexed is associated with additional costs related to administration (estimated at €235 per month), whereas orally administered erlotinib is not associated with any administration costs. Pemetrexed total monthly treatment costs are therefore €3149, €1104 higher than erlotinib total monthly treatment costs. The cost saving associated with erlotinib would allow approximately 54% more patients to be treated with erlotinib maintenance therapy, based on a fixed health-care budget. Furthermore, it is anticipated that the management of pemetrexed-related adverse events (e.g., neutropenia, anaemia) would be more costly than those related to erlotinib use (e.g., rash, pruritus). Therefore, the cost saving when using erlotinib versus pemetrexed for first-line maintenance therapy may be greater in a real-world setting. **CONCLUSIONS:** Based on Spanish costs, erlotinib is a cost-saving treatment option compared with pemetrexed, for the first-line maintenance therapy of patients with locally advanced or mNSCLC.

PCN45

DIFFERENCES IN HEALTH-CARE COSTS FOR PATIENTS WITH CASTRATION-RESISTANT PROSTATE CANCER (CRPC) TREATED BY ONCOLOGISTS OR UROLOGISTS

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OBJECTIVES: Patients with CRPC may be treated by urologists or oncologists. This study examined differences in total health-care costs and prostate cancer-specific costs in patients treated by oncologists or urologists. **METHODS:** A retrospective study design used medical and pharmacy claims (2001–2007) to identify patients with CRPC from a large US-managed care health plan. Patients were stratified based on the specialist providing treatment following castration; an oncologist (with/without a urologist, ONC), and a urologist without an oncologist (URO). A 6-month baseline period was used to assess patient characteristics and initial clinical status; a variable follow-up period (until disenrollment or December 31, 2008) was used to assess total health-care costs. Lin's regression was used to assess costs adjusting for the variable follow-up and patient and treatment characteristics. **RESULTS:** A total of 995 URO and 1590 ONC patients with CRPC were identified. Mean age was higher in URO patients than in ONC patients (75.5 vs. 71.1 years, $P < 0.001$). The URO cohort had a lower average Charlson comorbidity score (3.7 vs. 4.9, $P < 0.001$), fewer comorbid illnesses (10.1 vs. 11.1, $P < 0.001$), and were less likely to have other cancers (17.7% vs. 27.4%, $P < 0.001$) or to have had hormones, chemotherapy, and radiation treatment during the baseline period. After multivariate adjustment, mean total health-care costs during the first year were $31,792 (URO), $54,306 (ONC with chemotherapy, $P < 0.05$), and $30,894 (ONC without chemotherapy); during 6 years of follow-up, cumulative costs rose to $86,706 (URO), $168,794 (ONC with chemotherapy), and $114,180 (ONC without chemotherapy), $P < 0.05$ for all. a similar pattern was observed for prostate cancer-specific cumulative costs. **CONCLUSIONS:** CRPC patients treated by oncologists, particularly patients with chemotherapy, had higher total and prostate cancer-related health-care costs than patients treated by urologists.

PCN46

ECONOMIC EVALUATION OF ONCOTYPE DX® TO TARGET CHEMOTHERAPY USE IN LYMPH-NODE–NEGATIVE, OESTROGEN-RECEPTOR–POSITIVE, EARLY-STAGE BREAST CANCER IN IRELAND

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OBJECTIVES: Oncotype DX® is a clinically validated assay used to guide chemotherapy decision-making for patients with early-stage breast cancer. Patients classified as low risk by Oncotype DX® have low likelihood of benefitting from chemotherapy. By foregoing chemotherapy, patients avoid the risk of chemotherapy-related toxicities. For those patients reclassified by Oncotype DX® as high risk, the assay identifies patients who are likely to gain a large benefit from chemotherapy. The study objective was to estimate the health-care costs of using Oncotype DX® testing in early-stage, lymph node-negative breast cancer in Ireland. **METHODS:** A cost-analysis estimated the health-care costs (chemotherapy, administration, adverse events [AEs], and G-CSF costs) in patients whose treatment decisions are informed by Oncotype DX® testing. The perspective was that of the Irish health-care system. The chemotherapy regimen was docetaxel and cyclophosphamide (4 × 21-day cycles), costing approximately €9200. Univariate sensitivity analysis was performed, together with a probabilistic sensitivity analysis (PSA) of the net reduction in chemotherapy usage from Oncotype DX® testing. In a meta-analysis of seven published studies, there was an estimated 30% (95% CI –40%, –21%; $P = 0.0003$) absolute reduction in chemotherapy usage after Oncotype DX® testing (ratio 0.49 [95% CI 0.41, 0.58]; $P < 0.00001$). **RESULTS:** Adoption of Oncotype DX® testing resulted in approximate cost-neutrality (0.4% increase in cost) to the Irish health-care system, under the above conditions. The main cost drivers were: net reduction in chemotherapy usage from Oncotype DX® testing and the rate of G-CSF usage. From the PSA, the probability of Oncotype DX® being cost-saving is approximately 47%. **CONCLUSIONS:** Using Oncotype DX® to inform chemotherapy decisions in early-stage breast cancer has the potential to reduce the incidence of chemotherapy-induced AEs, while being approximately cost-neutral to the Irish health-care system. a cost-effectiveness analysis would be expected to result in a low incremental cost-effectiveness ratio.

PCN47

CHANGE OF ANTIFUNGAL TREATMENT PATTERNS AND ASSOCIATED COSTS IN PATIENTS WITH ACUTE MYELOGENOUS LEUKEMIA (AML) AFTER CHEMOTHERAPY IN A GERMAN HOSPITAL FROM 2004 TO 2006

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OBJECTIVES: To describe changes in outcomes, treatment patterns and costs of the management of hospitalized patients with acute AML after chemotherapy in Germany