

Oficial de la Federación, 23-04-07). Results are expressed as AE or its treatment cost in US dollars. **RESULTS:** Eight oncologists participated in the Panel. Consensus was achieved for all items after the questionnaire's second filling round. Second line treatment for NSCLC cost estimate was \$5377.46 (includes four chemotherapy cycles with docetaxel, administration costs and premedication costs). Estimated cost for AEs per event was: RA \$112.13, AN \$140.50, NS \$194.56, VO \$243.08, DR \$243.64, HS \$251.56, NP \$495.27, TC \$948.00, PNA \$1167.02, DS \$1807.86, AX \$1939.88, ST \$2055.82, FN \$2527.39, and ILD \$5189.02. **CONCLUSION:** ILD was the most expensive AE due to NSCLC treatment, while the most costly were those incurring in emergency room visits and/or patient hospitalization.

PCN46

COMPARISON OF SURGICAL TREATMENT COSTS OF NONMELANOMA SKIN CANCER PATIENTS IN A UNIVERSITY-AFFILIATED PRACTICE

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OBJECTIVE: Non-melanoma skin cancer incidence is increasing yet no specific guidelines for treatment selection exist. Reports vary on surgical treatment efficacy, and treatment choice may be based in-part on costs, despite little comparative cost information. We compared 2007 treatment costs of the three most common nonmelanoma skin cancer treatments: tumor destruction by ED&C, excision, and histologically-guided serial excision (Mohs surgery). **METHODS:** We studied 936 consecutive non-melanoma skin cancers diagnosed in 1999–2000 in a university-affiliated dermatology practice. Clinical and utilization data were obtained from patient surveys and medical records. We determined cost of treatments, repairs, pathology, and biopsies based on size, lesion location, number of Mohs stages, medications, and physician visits, using CPT codes and Medicare fees. We controlled for procedure risk-selection factors in our sample. **RESULTS:** A total of 27.2% of lesions were treated with ED&C, 29.2% with excision, and 43.6% with Mohs surgery. The weighted average costs per lesion for initial treatment for ED&C, excision, and Mohs were \$221, \$529, and \$1287, respectively. When wound repairs, pathology, drug costs and follow-up physician visits were included, costs rose to \$646, \$1531, and \$2805. When controlling for risk selection using Mohs sample for baseline risk, initial costs changed little (\$232, \$578, \$1287). However, when adding all costs to the controlled sample, the totals rose to \$1750, \$2096, and \$2805, and differences across treatments diminished. The uncontrolled costs of Mohs procedure itself (46%) accounts for a greater percentage of total costs compared with the other two procedures (35%, 34%), and more than subsequent repair costs (31%, 20% 2%). **CONCLUSION:** Mohs surgery was the most costly procedure, however cost differences across treatments diminished when controlling for treatment selection factors. This is the first cost study which compares surgical treatment costs using the new (2007) Medicare/CPT costing rules allowing higher payments for increased complexity of lesion location.

PCN47

IMPACT OF HIV INFECTION ON INVASIVE CERVICAL CANCER INCIDENCE AND TREATMENT COSTS IN SOUTH AFRICAN WOMEN

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OBJECTIVE: To assess the impact of the human immunodeficiency virus (HIV) on the pathogenesis of human papillomavirus (HPV) infection, precancerous lesions, invasive cervical cancer, and total treatment costs in South African women. Invasive cervical cancer is the second most common cancer among South African women. The high prevalence of HIV in South Africa (18%) is likely a contributing factor to the high rates of cervical cancer, as immunocompromised patients are at higher risk of HPV infection and associated precancerous lesions. **METHODS:** We developed a lifetime Markov simulation model of the natural history of cervical neoplasia and HIV infection. The model was used to predict the impact of HIV and acquired immunodeficiency syndrome (AIDS)-related mortality on the course of cervical disease in a hypothetical cohort of 100,000 South African women. Clinical data were based on published South African literature, high-quality clinical studies, and expert opinion. Risk of progression of HIV/AIDS was based on CD4 cell counts and viral load levels. Primary outcome measures included lifetime risk of cervical intraepithelial neoplasia and cervical cancer, years of life saved, quality-adjusted life years saved (QALYs), and total lifetime costs. **RESULTS:** Lifetime risk of cervical cancer ranged from 2.3% among HIV-negative women to 3.3% in HIV-positive women. In a cohort of 100,000 women, the high rate of HIV infection in South Africa led to an additional 5200 HPV infections, 490 cervical cancers, and 175 cervical cancer deaths. HIV infection decreased average life expectancy among South African women by 3.31 years or 3.28 QALYs and increased costs by approximately Rand 21,400 per woman. **CONCLUSION:** HIV infection contributes to higher rates of invasive cervical cancer and increases costs. Given the high prevalence of HIV infection in South Africa, more frequent cervical cancer screening for HIV-positive women may be warranted.

PCN48

LONGITUDINAL COMPARISON ACROSS TREATMENTS, RISK AND AGE OF WORK LOSS COSTS IN PROSTATE CANCER PATIENTS: 10 YEAR PATTERNS

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OBJECTIVE: The few workloss studies of prostate cancer patients are short-term and single-treatment focused. We compare long-term patterns of workloss and costs of 5414 newly diagnosed patients over 10 years stratified by treatment type, age and risk group. **METHODS:** Workloss patterns for prostate cancer were identified using CaPSURE, a national disease registry that includes clinical data and patient-reported outcome questionnaires, including demographics, co-morbidity, risk, and work patterns at 31 academic and community urology practices. Both change in work status (decreased if changed from full to part-time or disability, increased if changed back to full time, or no change) and hours lost were assessed at six-month intervals over ten years. National hourly wages were used to determine work-loss costs by age, disease risk, and treatment type. **RESULTS:** Patients reported average weekly work reductions of 15.7 hours

in the first 6 month period resulting in \$6310 in lost wages. This loss decreased in the 2nd 6 month period as 6.2% reported increasing work status, 88% stayed the same, and 5.2% reported additional decreases, which continued into the first half of year 2. Work loss then increased to 7% until 6 years post treatment when it slowly decreased. Hours of work loss and gain over 10 years resulted in a weighted cumulative average wage loss of \$146,500. Those at moderate risk lost more wages than high or low risk patients. Most wages were lost by those receiving androgen deprivation therapy medications alone (\$190,000), while those receiving cryotherapy had the lowest wage loss (\$99,500). Radical prostatectomy treatment alone resulted in \$142,100 lost wages over 10 years. **CONCLUSION:** The wages lost after treatment for prostate cancer are high. This is the first long-term look at prostate cancer workloss. Although most wage loss occurs in the first six months, substantial loss continues over the next ten years.

PCN49

THE COST OF TREATING SKELETAL-RELATED EVENTS IN PATIENTS WITH BONE METASTASES SECONDARY TO BREAST, LUNG, OR PROSTATE CANCER

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OBJECTIVE: Metastatic bone disease (MBD) and subsequent skeletal-related events (SREs) are common complications secondary to solid tumors. We conducted a retrospective analysis of US health insurance claims to examine the cost of SREs among patients with MBD secondary to breast, lung, or prostate cancer. **METHODS:** Data were obtained from i3's Lab Rx Database from May 1, 2000 to March 31, 2005. Patients were included if they had at least two ICD-9 diagnoses of breast, lung, or prostate cancer; at least two diagnoses of MBD; and at least one SRE on or after the initial MBD diagnosis. SREs were defined as a pathological fracture, spinal cord compression, surgery to the bone, or radiation to the bone and were identified using ICD-9 and CPT-4 codes. Patients had to be continuously insured for at least six months prior to their first SRE (index date) and one month after their index date. Descriptive statistics were calculated and the annual cost of SREs was estimated using Kaplan-Meier curves to adjust for censoring. **RESULTS:** In the study period, 3584 patients were diagnosed with breast, lung, or prostate cancer and MBD, and 1840 (51%) experienced at least one incident SRE. Regardless of tumor type, patients were most frequently found to have radiation therapy (86%–89%) followed by pathological fracture (23%–29%), bone surgery (12%–16%), and spinal cord compression (7%–9%). The adjusted mean costs associated with SREs in the one year after the index SRE ranged from \$12,469 to \$17,408, with the highest costs associated with radiation therapy (\$5930 to \$7152), pathological fracture (\$3179 to \$6624), and bone surgery (\$2218 to \$2536). **CONCLUSION:** This analysis of patients with cancer-related MBD revealed that the incidence of SREs is high and their annual economic impact is substantial regardless of tumor type.

PCN50

THE COST OF TREATING SKELETAL-RELATED EVENTS IN PATIENTS WITH MULTIPLE MYELOMA

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OBJECTIVE: Multiple myeloma (MM) is characterized by the accumulation of monoclonal plasma cells and osteolytic bone

destruction and is complicated by skeletal-related events (SREs) which are associated with significant morbidity. We conducted a retrospective analysis of US health insurance claims to examine the cost of SREs among patients with MM and at least one SRE. **METHODS:** Data were obtained from i3's Lab Rx Database from May 1, 2000 to May 31, 2005. Patients were included if they had at least 2 ICD-9 diagnoses of MM (ICD-9 203.0x); and at least 1 SRE on or after the initial MM diagnosis. SREs were defined as a pathological fracture, spinal cord compression, surgery to the bone, or radiation to the bone and were identified using ICD-9 and CPT-4 codes. Patients had to be continuously insured for at least six months prior to their first SRE (index date) and one month after their index date. Descriptive statistics were calculated and annual cost of SREs was estimated using Kaplan-Meier curves to adjust for censoring. **RESULTS:** In the study period, 876 patients were diagnosed with MM, and 429 (49%) experienced at least 1 incident SRE. The mean time from MM diagnosis to index SRE was 259 days. Pathological fracture (60%) and radiation therapy (59%) were the most frequently experienced SREs followed by surgery to the bone (23%). Among these patients, 61% had 1 type of SRE, 27% had 2 types of SREs and 12% had 3 or more. The mean charges associated with SREs in the 1 year post SRE was \$20,285, with the highest charges associated with pathological fracture (\$11,370), followed by bone surgery (\$4,020), and radiation therapy (\$2,966). **CONCLUSION:** This analysis of patients with MM revealed that the incidence of SREs is high and their annual economic impact is substantial.

PCN51

DIRECT ECONOMIC BURDEN OF HIGH RISK AND METASTATIC MELANOMA: EVIDENCE FROM THE SEER-MEDICARE LINKED DATABASE

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OBJECTIVE: Document total medical resource utilization and associated costs to the Medicare system for elderly patients with high risk (stages IIB/C, IIIA/B, IIIC) or metastatic (stage IV) malignant melanoma. **METHODS:** Data was taken from the Surveillance, Epidemiology, and End Results (SEER)-Medicare linked database combining clinical information on incident cancer cases in the US between 1991 and 2002 with longitudinal (1991–2005) Medicare claims. Subjects aged ≥ 65 years with ≥ 1 stage IIB or higher melanoma diagnosis were selected. Index dates was defined as the date of the first observed stage IIB or higher diagnosis. Utilization and costs were descriptively analyzed for each patient from their index date until death, interruption of benefits coverage (≥ 6 months), or end of the database (December 31, 2005). **RESULTS:** A total of 6470 subjects met all inclusion criteria. Stage distribution was: IIB/C (38%); IIIA/B (46%); IIIC (1%); IV (15%). Median follow-up was 56, 39, 16, and 6 months for each stage, respectively. On average, patients with stage IV disease incurred 3.1 hospital days per month, compared to 0.5, 0.6, and 1.1 days per month for subjects with stage IIB/C, IIIA/B, and IIIC melanoma, respectively (all $P < 0.001$). Mean inpatient costs for stage IV disease were \$3337 per patient per month, versus \$589, \$880, and \$1465 for stages IIB/C, IIIA/B, and IIIC, respectively (all $P < 0.001$). Total health care costs, excluding prescription drugs, were \$8190 per patient per month for stage IV disease, compared to \$1703, \$2536, \$4880 for stages IIB/C, IIIA/B, and IIIC, respectively (all $P < 0.001$). **CONCLUSION:** This study provides stage-specific estimates of resource utilization and costs in high risk and metastatic melanoma using real-world administrative data. Findings