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 work loss. Although most wage loss occurs in the first six months, substantial loss continues over the next ten years.

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 2 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 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.

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 (1991–2003) 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, $2356, $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...
suggest that the cost burden of advanced melanoma to the Medicare system is high. Efforts to address the large unmet treatment need in patients with advanced melanoma may result in cost savings for Medicare.

DIRECT MEDICAL COST OF BREAST CANCER BY STAGE OF CLINICAL DISEASE. A MEXICAN COHORT

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OBJECTIVE: To estimate direct medical costs of breast cancer (BC) by stage of clinical disease in the Ginecology Hospital of West Medical Center, Instituto Mexicano del Seguro Social (IMSS), Guadalajara (GH). METHODS: Clinical data and resource utilization were obtained individually from medical records of patients who were breast cancer diagnosed and received attention at GH between March 2005 and February 2007. This data was retrospectively collected with the following inclusion criteria: 1) histopathology-study confirmed BC, 2) recently diagnosed BC, and 3) absence of any other form of cancer. Only direct medical costs were considered (from the GH perspective) using a bottom up approach (medications, chemotherapy, radiotherapy, hospitalization, laboratory tests and surgery). Unitary costs were obtained from GH’s Management. cost are expressed in USD and adjusted to December 2006. A discount rate of 3% was used. Tests were applied in order to define the censoring mechanism (according to Glick) to define the adequate cost analysis method. To compare costs among stage use ANOVA. Mean Cost estimation (TMC) determinants were obtained using a generalized linear Model (GLM).

RESULTS: A total of 160 patients were included, 40 in each stage (I, II, III, IV), mean age 50 years (±11), with a therapy duration of 29 months (±11). 82% of patients showed ductal-infiltrating histologic type carcinoma. TMC per patient during the follow-up period was ($20,612±200). Chemotherapy was the most costly resource ($7526±10) followed by the visit to the specialist and emergency room ($3581±88) and hospitalization costs ($3096±45). GLMx statistically-significant TMC determinants were stage II, III and IV (p < 0.00), disease progression (p < 0.00) death (p < 0.00) and age (p < 0.046). CONCLUSION: The direct cost in medical attention increases with stage, progression of disease or patient death, stage IV, less age, longer duration of treatment and disease progression, effectively predicted major costs.

THE BURDEN OF MANAGING PLEURAL EFFUSIONS IN CML PATIENTS POST-IMATINIB FAILURE: A LITERATURE-BASED ECONOMIC ANALYSIS

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OBJECTIVE: To develop an economic analysis of the management of pleural effusions in CML patients receiving dasatinib.

METHODS: A cost of treatment analysis was developed using resource utilization data published for 48 patients with dasatinib-related pleural effusions at a large cancer center. Costs were derived from median reimbursements for relevant CPT codes for outpatient services and medical literature for inpatient services. The base case analysis assumed 100% incurred two additional physician visits, two chest x-rays, and a course of diuretics; 37.5% ECHO; 30% steroids; 24% recurrent effusions; 19% multiple thoracentesis procedures; 4% chest tube; 4% Denver shunt; and 2% pericardial window. Sensitivity analyses were conducted for types of procedures used. All costs were adjusted to 2007 US dollars. RESULTS: Of pleural effusions reported, 58% involved ≥ 25% of one lung volume and were managed medically costing $576 ± 300 per episode, including physician visits, ECHO, chest X-rays and medications. The other 42% of pleural effusions was more significant, involving 26%–75% of one lung volume, with half of those patients requiring invasive procedures. The cost of invasive procedures for inpatient management of pleural effusions was $10,616 for chest tube, $15,170 with pleural catheter, and $15,344 for pericardial window. The cost of invasive outpatient management ranged from $713 for ultrasound thoracentesis to $4598 for pleural catheter. The average cost of treating a pleural effusion adverse event (including all severity levels) ranged from $2062 to $3000 depending on whether thoracentesis or placement of pleural catheter was utilized. Important drivers included recurrent effusions. CONCLUSION: This economic analysis based on actually observed treatment patterns suggests that the management of pleural effusions in CML patients receiving dasatinib is costly and requires intensive resource utilization. Effective tyrosine kinase inhibitors with lower rates of pleural effusions may represent clinically and economically valuable alternatives for imatinib-resistant or -intolerant CML patients.

A COST-UTILITY ANALYSIS OF PRIMARY PROPHYLAXIS VERSUS SECONDARY PROPHYLAXIS WITH COLONY-STIMULATING FACTOR IN ELDERLY PATIENTS WITH DIFFUSE AGGRESSIVE LYMPHOMA RECEIVING CURATIVE-INTENT CHEMOTHERAPY USING ONTARIO HEALTH ECONOMIC DATA

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OBJECTIVE: The 2006 American Society of Clinical Oncology guideline recommends primary prophylaxis (PP) with colony-stimulating factor (CSF) for elderly patients with diffuse aggressive lymphoma receiving chemotherapy, based on the assumption of equal survival and studies showing that CSF saved costs by reducing hospitalization from febrile neutropenia (FN). These analyses examined only one cycle of chemotherapy, and did not consider the costs of CSF in subsequent cycles, the strategy of secondary prophylaxis (SP) or patients’ preferences. This study examined the cost-effectiveness of PP with SP. METHODS: We conducted a cost-utility analysis to compare PP with CSF to SP with CSF for diffuse aggressive lymphoma. We used a Markov cohort model with a time horizon of 8 cycles of chemotherapy (i.e. 24 weeks), using a payer’s perspective (Ontario Ministry of Health). Ontario’s 2006 health economic data was used. The cost of hospitalization for FN was obtained from the Ontario Case Costing Initiative. Data for efficacies of CSF, probabilities and utilities were obtained from published literature. Monte Carlo simulation was conducted. RESULTS: The ICER of PP to SP was $739,999/QALY. One-way sensitivity analyses (willingness-to-pay threshold = $100,000) showed that if PP were to be cost-effective, the cost of hospitalization for FN had to be >$31,138 (2.5 times > base case), the cost of CSF per cycle <$96 (base case = $1960), the risk of 1st cycle FN >4% (base case = 24%), or the relative risk reduction of FN with CSF >97% (base case = 41%). Our result was robust to all variables. Second order