is more costly than BSC, it is more effective. Using the US $50,000/QALY incremental cost-effectiveness threshold, sunitinib seems to be cost-effective in the second-line treatment of mRCC in Argentina.

**PCN16**

**THE RELATIONSHIP BETWEEN SHORT-TERM RESPONSE AND LONG-TERM OUTCOMES IN PATIENTS WITH CHRONIC PHASE CHRONIC MYELOGENOUS LEUKAEMIA**

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**OBJECTIVES:** Chronic myelogenous leukaemia (CML) is a progressive disease that is associated with significant health and economic burden. Although durable response from current treatments such as imatinib is achievable for many patients, a subset of patients develop resistant disease. This study aims to predict the impact of short-term response upon the cost-effectiveness of new interventions to treat CML.

**METHODS:** A Markov model was developed to estimate the non-drug costs and health outcomes associated with treatments for chronic phase CML. Two hypothetical treatment options were modelled, each with a different short-term best response profile. Short-term response was defined as “no response” (NR), “complete haematological response” (CHR), partial cytogenetic response (PCR) and complete cytogenetic response (CCR). Patients progressed through the stages of the disease at different rates, based on their short-term best response to treatment. Unit costs were drawn from national databases, and were factored according to resource use to estimate total costs. Because the purpose of this study is to inform the cost-effectiveness of novel treatments, drug costs are not included in the model. Resource use and quality-adjusted life year (QALY) scores were stratified according to the patient’s current health status and response level.

**RESULTS:** Patients who achieve no response are estimated to experience a total of 1.48 QALYs and incur costs of £39,724 over their lifetime. Those who achieve CHR, PCR and CCR experience 5.11, 9.73 and 10.00 QALYs, and costs of £55,816, £65,610 and £66,562 respectively. **CONCLUSION:** Short-term response is related both to long-term survival and increased costs. The increased costs associated with improved response are a result of the patient’s improved survival and consequent increased resource use. However, these costs may be offset by reductions in major cost drivers such as hospitalisation and/or other resource use as a result of the improved response.

**PCN17**

**MEDICAL COST CONSIDERATIONS OF FIXED DOSING REGIMENS OF ERYTHROPOIETIC AGENTS IN PATIENTS WITH CHEMOTHERAPY-INDUCED ANEMIA**

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**OBJECTIVES:** Anemia is commonly experienced by cancer patients receiving chemotherapy. Two erythropoietic agents have been FDA-approved for fixed dosing in patients with chemotherapy-induced anemia (CIA) [epoetin alfa (EPO) 40,000 Units QW, darbepoetin alfa (DARB) 500 mcg Q3W]. The current analysis was conducted to compare medical costs between approved EPO and DARB dosages based on clinical data from two 16-week, randomized, controlled trials (Canon JNCI 2006, Waltzman Oncologist 2005).

**METHODS:** A cost-minimization analysis was utilized to compare direct medical costs (drug acquisition and visit costs) of treating patients with EPO QW versus DARB Q3W. Drug cost was based on December 2006 U.S. wholesale acquisition cost (EPO $12.52/1000 Units; DARB $4.46/mcg). Visit cost was calculated based on physician office visit and injection cost ($53.27). Sensitivity analyses were conducted on drug cost, physician visit cost, hemoglobin monitoring, and transfusion requirements.

**RESULTS:** Results from the base case scenario showed that direct medical costs of treating patients with DARB Q3W was $1595 more expensive (28% cost premium) than treating patients with EPO QW ($7795 for EPO QW vs. $7390 for DARB Q3W). Drug cost represented >90% of total direct medical costs in both groups (EPO: drug cost $5239, visit cost $559; DARB: drug cost $7149, visit cost $240). Sensitivity analyses revealed the cost premium associated with DARB Q3W therapy to be between 13% and 42%, indicating that direct medical cost of EPO QW therapy was consistently lower than that of DARB Q3W.

**CONCLUSION:** This economic analysis demonstrated that direct medical costs for DARB Q3W therapy was consistently higher than EPO QW, with cost premiums associated with DARB Q3W ranging from 13%–42%. Drug cost was the major driver of total direct medical cost in both groups.

**PCN18**

**BURDEN OF ILLNESS ANALYSIS OF MALIGNANT METASTATIC MELANOMA IN THE UNITED STATES**

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**OBJECTIVES:** Malignant metastatic melanoma (MMM), the most serious form of skin cancer, currently accounts for 79% of all skin cancer deaths, and is becoming increasingly common. MMM patients have limited treatment options and low survival rates. The five-year survival rate for patients with regional melanoma is 63.8%, compared to 16.0% for patients with metastatic melanoma. Despite the importance of this cancer, data on its economic burden are limited.

**METHODS:** A prevalence-based model was developed to estimate the aggregate annual cost burden attributable to MMM from a societal perspective, including costs of medical treatment and lost productivity in the US. Key relationships represented in the model include the annual numbers of patients treated for MMM by age group; utilization of cancer-specific treatments; unit costs of these treatments; work days missed by these patients; and wage rates. Data sources included the linked Surveillance, Epidemiology and End Results (SEER)–Medicare database, the Bureau of Labor Statistics, and published literature.

**RESULTS:** The annual prevalence of MMM in the US was estimated to be 5778 cases. The associated annual cost burden was estimated at approximately $202 million ($34,991 per patient) in 2005. Health care costs and lost productivity accounted for 87.1% ($176 million) and 12.9% ($26 million) of the total burden, respectively. The principal cost driver was cancer-related hospitalization (accounting for 31.4% of total health care costs) for procedures including lymphadenectomy, radiofrequency ablation, chemotherapy, and arterial embolization. SNF services, hospice care, physician services and outpatient hospital services accounted for 5.8%, 5.9%, 11.6% and 8.0% of health care costs, respectively. Sensitivity analyses varying assumptions regarding health care utilization and wage rates resulted in a range in the estimated annual burden from $207 to $216 million.

**CONCLUSION:** The economic burden of MMM in the US is substantial. New therapies for MMM have the potential to yield considerable economic benefits to society.