

model predicts an increase in cost for the German health care system in the first year model does not take into account improvements in quality of life.

## PCN41

#### HEXVIX FLUORESCENCE CYSTOSCOPY FOR NON-INVASIVE BLADDER CANCER MANAGEMENT: AN ECONOMIC MODEL OF THE IMPACT ON HEALTH CARE COSTS IN THE UNITED KINGDOM

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**OBJECTIVES:** Approximately 80% of newly diagnosed bladder cancer patients in the UK will be diagnosed with non-invasive bladder cancer (NIBC). The use of Hexvix (hexaminolevulinat) during transurethral resection of the bladder (TURB) results in a higher detection rate and more complete resection when compared to white light cystoscopy (WLC) alone. A decision tree model was developed to assess the budget impact associated with Hexvix. **METHODS:** The model structure, costs and treatment algorithms were based on the European Association of Urologist (EAU) guidelines, review of the literature and clinical practice in the UK. The model assumes a relative reduction in recurrence for Hexvix when compared to WLC based on data obtained with an unlicensed and less readily taken up fluorescent molecule. Model predictions include cost savings, reductions in procedures and disease-free days (DFD) over a two year time horizon. **RESULTS:** Of the 12,000 patients diagnosed with bladder cancer in the UK, 9641 were predicted by the model to have NIBC. In these patients, the model predicts an 18% reduction in the number of cystoscopies and 4.3% reduction in TURBs when Hexvix use was compared to WLC. In addition, an increase of 211 106 DFD was predicted over the 2 year time horizon (177,029 in 2410 high risk patients, 14,721 in 2410 medium risk patients and 19,355 in 4821 low risk patients). The model predicts an overall increase in cost of managing these patients of  $\leq 2,769,712$  (3.9%) over WLC, and an incremental cost of  $\leq 21.90$  per patient per disease-free year. **CONCLUSION:** Although the quality of life was not modelled the assumed reduction in the number of cystoscopies and TURBs could potentially have a significant impact on the quality of life. The increase in the cost of may be off-set by the improvement to the current regimen.

## PCN42

#### COST ANALYSIS OF SEPSIS MANAGEMENT AFTER MYELOSUPPRESSIVE CHEMOTHERAPY IN NSCLC AND LYMPHOMA PATIENTS: A GERMAN HOSPITAL PERSPECTIVE

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**OBJECTIVES:** To analyse resource use and direct medical cost of sepsis as adverse drug reaction of cancer treatment. Special regard was paid to the use of blood products. **METHODS:** Prospective observational study in a German academic cancer center (ACC). Consecutive non-small cell lung cancer (NSCLC) and lymphoma patients were enrolled at the start of first or second line (immuno) chemotherapy treatment. Patients receiving high dose chemotherapy were excluded. Sepsis (infection grade 4) was recorded prospectively according to the Common Terminology Criteria for Adverse Events v3.0. Clinical data and

resource use at the ACC were collected from pre-planned chart reviews. Direct costs were calculated from ACC perspective. **RESULTS:** In all, 180 evaluable patients underwent a total of 633 chemotherapy cycles. Seven episodes of sepsis were observed in 7 patients (3.9%). Five of them had malignant lymphoma. Three patients received sepsis treatment at a local hospital and 4 at the ACC. All ACC patients received intravenous antibiotics and diagnostic work-up for infection. Blood components were transfused to 3 patients. Median and range of the number of transfusion units per patient were 6 (4–17), 14 (4–24), 23.5 (14–33) and 24 (4–74) for red blood cells, platelets, fresh frozen plasma and all blood components respectively. 3 of 4 patients were treated at an intensive care unit (ICU) for 9–31 days. Overall median length of stay was 18.5 days. Total cost per episode varied between €8.077 and €67.437. In all episodes basic hotel services and personnel costs were the cost driver (€3.795–35.898), followed by expenses for drugs (€1.489–9.151) and blood products (€0–10.976). **CONCLUSION:** Health care utilisation and cost of treating one episode of sepsis varied substantially. Transfusion need was heterogeneous but high on average. Further research should compare costs and revenue of high-cost-cases in the German DRG system.

## PCN43

#### COST OF INTRAVENOUS ADMINISTRATION OF BISPHOSPHONATES IN PATIENTS WITH METASTATIC BREAST CANCER

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**OBJECTIVES:** Breast cancer often metastasizes to the bone, which leads to poor quality of life for the patients. Many patients with bone metastases are currently treated with bisphosphonates. There are different molecules and formulations of bisphosphonates available. Intravenous (IV) administration is associated with more resource utilization and higher cost than oral administration due to use of hospital facilities, equipments and increased pharmacy and nurse time for preparing and administering the drug. The objective of this study was to estimate resource use and perform a microcosting analysis of bisphosphonate administration in the treatment of metastatic bone disease in Swedish breast cancer patients. **METHODS:** A sample of patients receiving IV administration of bisphosphonate was identified at two hospitals in Stockholm and Uppsala, Sweden. All patients had breast cancer with bone metastasis. Resources associated with IV administration were identified and the utilization estimated. The resource use attributable to the bisphosphonate administration during each patient visit was recorded in a data collection form specifically developed for the study. **RESULTS:** The 26 patients included in the study all received either ibandronate or zoledronic acid. The cost analysis showed that the mean cost of bisphosphonate administration to breast cancer patients was €94. Of this, 84% constituted direct costs and 16% indirect costs. The patients spent on average 76 minutes at the clinic and the administration took on average 16 minutes. Nursing time and cost of facilities were the greatest direct cost drivers. **CONCLUSION:** The patients included in the study all received bisphosphonates requiring short infusion times. The administration is associated with costs, which should be taken into account in the choice of bisphosphonate treatment. Bisphosphonates requiring longer infusion time than the drugs included in this study would be associated with higher costs. The incremental cost per additional infusion hour was estimate to about €33.