available in Brazil for preventing skeletal events (SE) in breast cancer patients with bone metastasis. METHODS: Indirect comparison of different clinical trials published do not allow us to consider that exist an efficacy difference among ibandronate acid, zoledronic acid and pamidronic acid (eg: Body et al. 2004; Rosen et al. 2003; Theriault et al. 1999). In our analysis only direct costs were considered. The indirect costs of treating SE were not estimated. For direct costs calculations we assumed the reduction in analgesics usage reported by De Cock et a. 2005 (Ibandronic acid: 7% reduction vs. Comparators: 3% reduction). The time horizon of the analysis was 14 months which represents the average overall survival of patients (Hotton J et al. 2004). Therefore discounting was not applied. The payer perspective was adopted under the Brazilian setting. A one-way sensitivity analysis was conducted. RESULTS: Results show that ibandronic acid offers the lowest treatment cost, followed by pamidronic acid and zoledronic acid (R$ 10,301, R$ 10,906 and R$ 12,829). Results were sensitive to drug prices. CONCLUSION: Results suggest ibandronate acid as a cost-saving alternative with better safety profile when compared to zoledronic acid and pamidronic acid under the Private Healthcare System perspective in Brazil.

**PCN35**

**ASSESSING THE IMPACT ON STAFF RESOURCES AND PATIENT WAITING TIME OF A SWITCH FROM IV TO ORAL CHEMOTHERAPY WITH VINORELBINE**

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OBJECTIVES: Navelbine® (Vinorelbine) Oral is an orally administered formulation of chemotherapy (CT) recently introduced in Italy in the treatment of NSCLC (Non Small Cell Lung Cancer) and Metastatic Breast Cancer. The purpose of this study is to evaluate the economic consequences of the impact on pharmacy, nursing time and patient waiting time of a switch from IV to oral CT in the treatment of NSCLC. METHODS: Cost-minimisation analysis was developed in order to evaluate the times required to deliver IV vinorelbine and oral vinorelbine. The comparison was made in two settings with different patient pathways, in the Cancer Center Unit of Istituto Nazionale dei Tumori, Milan and Azienda Ospedaliera di Busto Arsizio, Varese. A stopwatch was used to time elements of essential processes (pharmacy preparation and chemotherapy administration) and patient waiting time for the delivery of a single dose of chemotherapy, in order to build an hypothetic diagnostic and therapeutic pathway and to describe different phases, times and costs for each formulation. RESULTS: Administration of Vinorelbine Oral was less time consuming in both Cancer Centres. In the base case scenario, total costs were €171.75 for Oral Vinorelbine (60 mg/m²) versus €214.84 for IV Vinorelbine (25 mg/m²); for Oral Vinorelbine (80 mg/m²) versus IV Vinorelbine (30 mg/m²) costs were €240.46 and €232.82 respectively. Productivity loss and patient waiting time were key drivers to our cost minimisation analysis. Results were submitted to a Sensitivity Analysis. CONCLUSION: Delivery of oral CT is less resource intensive and time consuming than IV CT and reduces overall patient waiting in hospital. A switch from Vinorelbine IV to Oral formulation with home administration could increase the capacity of the Day Hospital Unit, the number of prescriptions prepared by pharmacy and thereafter a reduction of the patient waiting list wich is associated with a global cost reduction.

**PCN36**

**ECONOMIC EVALUATION OF ERLOTINIB, DOCETAXEL AND PEMETREXED AS SECOND LINE TREATMENT IN PATIENTS WITH ADVANCED NON–SMALL-CELL LUNG CANCER (NSCLC). A COST-MINIMIZATION IN ITALIAN HOSPITALS**

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OBJECTIVES: The purpose of this study was to compare the costs of the drug, drug administration and managing of adverse events (AEs) using erlotinib, docetaxel and pemetrexed as second line therapy in non-small cell lung cancer (NSCLC), in the Italian hospital setting. METHODS: Since a clinical study comparing the three therapies is not available, the major clinical findings from randomized trials of each drug were used showing that all three chemotherapies have comparable efficacy results. Therefore a cost-minimisation analysis was performed. Costs from the hospital perspective were calculated according to Italian clinical practice. Consumption of each chemotherapy was based on respective clinical trial, while to estimate the resources used in the AEs and for the drug administration a Delphi panel of experts was structured. In order to allow a comparison between oral daily therapy (erlotinib) and infusion therapies administered every 21 days (docetaxel and pemetrexed), costs were computed on a monthly basis. RESULTS: The total per-patient cost for erlotinib was €1669, €2569 for docetaxel and €3324 for pemetrexed for one month therapy from the hospital perspective. The cost of AEs represents the 8%, 18%, and 3% of the total cost for erlotinib, docetaxel and pemetrexed. Sensitivity analysis showed that no reasonable changes in the quantity and cost of services reduced the savings associated with erlotinib by more than 33%. CONCLUSION: A cost-minimisation analysis was performed to assess the cost of three second line chemotherapies in non-small cell lung cancer. The less costly alternative was erlotinib which could produce savings between 40% anD 50% of total hospital costs in Italy.

**PCN37**

**RESOURCE USE AND TIME SAVINGS IN SPAIN LINKED WITH NEW CHEMOTHERAPY PRESENTATIONS: THE CASE OF OXALIPLATIN**

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OBJECTIVES: To value the use of resources and costs linked with different presentations of oxaliplatin: lyophilised powder and concentrated solution. METHODS: A cost-minimization analysis was conducted with the Spanish hospital’s perspective. Time consumption and use of resources linked with the preparation of the products were obtained from a study conducted in a cancer center in France. The preparation was performed according to standard clinical practice and several measures were taken to avoid any bias in the process. Spanish unitary costs were applied to all resource measures: technicians time, consumables (needles, syringes, water, tampon gauze and air intake), using cost data from a Spanish oncology centre. RESULTS: The new concentration solution of oxaliplatin achieves a 36% reduction in preparation time, saving 139 seconds compared with the lyophilised powder (p<0.001) and also is linked to less use of consumables. Monetary savings linked to preparation time and
The concentration solution, a new presentation of oxaliplatin, has significant advantages compared to the traditional lyophilised powder. These advantages have been measured as monetary savings linked to less preparation time and use of consumables. In the future it would be of interest to assess other advantages of concentrated solution chemotherapies over the more conventional ones like less errors of medication due to manipulation.

**PCN38**

**COST ANALYSIS OF XELOX VS. FOLFOX-4 ± BEVACIZUMAB (BEV) IN METASTATIC COLORECTAL CANCER (MCRC) IN AN ITALIAN HOSPITAL SETTING**

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**OBJECTIVES:** A recent randomized 2 × 2 phase III trial compared oral capecitabine + IV oxaliplatin (XELOX), IV 5-FU/LV/oxaliplatin (FOLFOX-4), XELOX+bev, and FOLFOX-4+bev as first-line therapy for MCRC. FOLFOX-4 was the regulatory control. XELOX was non-inferior to FOLFOX-4 for progression-free survival, and bev-containing regimens were superior to comparison arms. This economic analysis compared expected costs in XELOX vs. FOLFOX-4 arms in an Italian hospital setting from a payer and societal perspective.

**METHODS:** Direct medical and indirect cost estimates (for patient time and travel) were compared. Resource use and patient time were estimated based on trial data and protocols. Data collected during the trial and used in the analysis were as follows: no. of visits/duration of drug administration, central venous access management, treatment of adverse events (AE) including hospital days for treatment-related AEs and total hours of ambulatory encounters. Unit costs were based on hospital costs and other published sources. RESULTS: Total direct medical cost estimates were higher for bi-weekly FOLFOX-4 vs. 3-weekly XELOX: €17,900 vs. €10,900. XELOX had higher drug costs while FOLFOX-4 had higher drug administration costs, with about 15 more visits on average per patient. Costs for hospitalization and ambulatory encounters were slightly lower for FOLFOX-4 (€500 vs. €800); other medications and venous access were slightly higher for FOLFOX-4 (€5000 vs. €2000). Similar patterns held for FOLFOX-4+bev vs. XELOX+bev (total direct medical cost estimates €33,100 vs. €25,000). Indirect time cost estimates were lower with XELOX due to fewer cycles and visits; estimated savings range from €9,000–€11,000. CONCLUSION: XELOX is cost-saving from both payer and societal perspective in comparison to FOLFOX-4.

**PCN39**

**THE COST OF TREATING AND MANAGING ABNORMAL CERVICAL CONDITIONS IN IRELAND**

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**OBJECTIVES:** The objective of this study was to estimate Irish specific costs for managing abnormal cervical conditions which are required for cost-effectiveness analysis of prophylactic cervical cancer vaccination in Ireland. **METHODS:** This was a retrospective study that collected resource utilisation and clinical outcome data on 395 women attending four colposcopy clinics in Ireland. Sampling was stratified to include 10%, 35%, 25%, 25% and 5% of women in the borderline, mild, moderate, severe and cancer cytology groups respectively. Data were collected from the date of referral until the latest treatment or the patient returned to ‘normal’ cytology. Unit cost data, also collected during the study, were applied to the utilisation data to estimate costs. **RESULTS:** The mean age of all women with abnormal smears was 31 years (range 18–68). The average age of women with cancer was 48 (range 23–68). The average cost of treating women who initially had an abnormal smear but were subsequently observed to be histologically negative without receiving treatment was €317 (SD €147). The corresponding costs for women with CIN1, CIN2 and CIN3 were €522 (SD €235), €673 (SD €237), and €689 (SD €227) respectively. The average cost of treating invasive cervical cancer was €10,449 (SD €4,952). The total cost of managing abnormal cervical conditions was estimated at around €10 million per annum. **CONCLUSION:** Managing abnormal cervical conditions is expensive. Analysis in other countries found that prophylactic cervical cancer vaccination is a cost effective way to reduce these abnormalities [1]. This study will be used in a cost effectiveness analysis of prophylactic cervical cancer vaccination in Ireland. Reference: [1] Goldie SJ, et al. J Natl Cancer Inst 2004;96:604–15.

**PCN40**

**HEXVIX FLUORESCENCE CYSTOSCOPY FOR NON-INVASIVE BLADDER CANCER MANAGEMENT: AN ECONOMIC MODEL OF THE IMPACT ON GERMAN HEALTH CARE COSTS**

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**OBJECTIVES:** The purpose of this study was to estimate the budget impact on the German health care service of using Hexvix (hexaminolevulinate) cystoscopy in conjunction with white light cystoscopy (WLC) in the management of non-invasive bladder cancer (NIBC). Hexvix cystoscopy potentially allows more complete detection and delineation of bladder cancer tumours compared with standard WLC alone during transurethral resection of the bladder (TURB). This can potentially lead to fewer tumour recurrences through more effective tumour resection, and may change patient management. **METHODS:** A model was developed to simulate the flow of newly diagnosed bladder cancer patients through treatment one year after diagnosis. Model inputs, including procedure costs and clinical algorithms, are based on the bladder cancer guidelines by the European Association of Urology (EAU), literature review and German clinical practice. Based on data obtained with an unlicensed and less readily taken up fluorescent molecule, a relative reduction in recurrence rate is assumed in the model when compared to WLC. **RESULTS:** The model predicts that Hexvix is associated with a potential reduction in the number of procedures required compared to WLC alone (801 cystectomies and 31,734 TURBs with Hexvix compared to 881 and 33,823 with WLC alone) in the first year. This is estimated to result in a potential increase in costs to the German health care system of 5.76% in the first year. This is estimated to result in a potential increase in costs to the German health care system of 5.76% in the first year, compared to WLC alone in all newly diagnosed NIBC patients. **CONCLUSION:** The model illustrates how Hexvix, when used as an adjunct to WLC in TURB may result in the reduction of invasive, time intensive, high cost procedures such as cystectomies and TURBs, compared with WLC alone. Although the