

In the management of cervical lesions/cervical cancer, the most expensive are the costs of treatment.

PCN69

ECONOMIC BURDEN OF MELANOMA IN THREE EUROPEAN COUNTRIES: A RETROSPECTIVE OBSERVATIONAL STUDY

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OBJECTIVES: To estimate cost-of-illness data associated with treatment of patients with stage IIIB/IIIC melanoma with macroscopic lymph node involvement in France, Germany and the United Kingdom (UK), whose primary melanoma and regional lymph node metastases had been completely resected. **METHODS:** This retrospective observational study enrolled patients aged ≥ 18 years, first diagnosed between 1 January 2009 and 31 December 2011. Data were extracted from medical records and via patient survey. Costs were calculated in Euros (€) (France, Germany) or pound sterling (£) (UK) by collecting resource use and multiplying by country-specific unit costs. Costs were estimated from the health care provider perspective. National annual costs were estimated from study results and national disease prevalence estimates based on European cancer registry and other data. **RESULTS:** 49 centres provided data on 558 patients (55.7% male, 58.2% aged <65 years at diagnosis, 53.6% stage IIIB disease). Mean follow-up was 27 months in France, 26 months in Germany and 22 months in the UK. Most patients received no adjuvant treatment in France (93.0%) and the UK (97.4%). Use of interferon in Germany was limited (high-dose 11.0%; intermediate-dose 4.9%; low-dose 15.2%; pegylated 1.8%). Mean total direct cost per patient during follow-up was €23,582 in France, €32,058 in Germany and £31,123 (£37,348) in the UK. The largest cost drivers were melanoma treatment (mean €14,004 France, €21,269 Germany and £24,385 UK) and hospitalisation/emergency treatment (mean €6,634 France, €6,950 Germany and £2,827 UK). Total mean indirect costs per patient were €129 in France, €4,441 in Germany and £1,427 (£1,712) in the UK. Preliminary estimates for annual national direct cost were €13.1 million in France, €30.2 million in Germany and £22.8 (£27.6) million in the UK. **CONCLUSIONS:** The economic burden of stage IIIB/IIIC melanoma with macroscopic lymph node involvement was substantial in all three countries. Indirect costs varied by country.

PCN70

COST AND BURDEN OF NON-SMALL CELL LUNG CANCER'S IN PORTUGAL

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OBJECTIVES: This study estimates the impact of Non-Small Cell Lung Cancer (NSCLC) on population health levels and its economic impact in Portugal in 2012. **METHODS:** Data from a cohort of 581 patients with NSCLC completed with an expert panel was used to develop a model of cumulated prevalence with a 6 months cycle period and a time horizon of 5 years. The impact on health status was measured using the Disability Adjusted Life Years (DALYs). The economic impact analysis includes two components. The first estimates the direct costs generated by NSCLC including consumption of inpatient care and outpatient care (consultations, medication, diagnostic exams, transportation, etc). The second estimates indirect costs related to loss of productivity due to NSCLC. **RESULTS:** A total of 3,180 deaths in Portugal in 2012 were caused by NSCLC, which corresponds to 2.0% of the total deaths in Portugal. The DALYs resulting from premature deaths caused by NSCLC in 2012 totaled 25,071 representing 4.5% of years lost generated by all deaths in the country. For 2012 it is estimated that 3,236 life years were lost due to disability. The total disease burden attributable to NSCLC is thus estimated at 28,307 DALY. The estimated direct cost generated by NSCLC was € 89 million and that total can be broken down into € 32 million for inpatient care and € 57 million for outpatient care. The indirect costs must also be taken into account and they added up to € 54 million. The economic burden of NSCLC is substantial, totaling € 143 million, about 0.09% of Portuguese GDP and 0.92% of all Portuguese health spending in 2012. **CONCLUSIONS:** NSCLC is an important cause of disease burden and costs in Portugal and should receive adequate attention from policy makers.

PCN71

METASTATIC PROSTATE CANCER AND SKELETAL RELATED EVENTS, A COST OF ILLNESS STUDY

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OBJECTIVES: To assess the intramural resource use and associated costs of treating patients with prostate cancer, metastatic to the bone, focusing on Skeletal Related Events (SREs). Secondary, to quantify the impact of SREs and different treatment strategies on total costs. **METHODS:** A retrospective bottom-up cost of illness study performed at a large regional teaching hospital in the Netherlands. **RESULTS:** A total of 136 patients were included, follow-up started at diagnosis of bone metastases and stopped at death. The mean total costs were EUR 17,931 per patient (median EUR 14,039), inpatient days were the most costly category at a mean of EUR 5955 (median EUR 3995). SREs that required hospitalization (n=53) were, at median costs of EUR

2039 to EUR 9346, depending on care required, more costly than SREs without hospitalization (n=165). These SREs had median costs of EUR 200 to EUR 1912, depending on care required. **CONCLUSIONS:** The impact of SREs on total costs could justify policy aimed at actively preventing SREs, e.g. with radionuclide therapy, possibly resulting in better quality of life and cost-reduction. Treatment of prostate cancer with bone metastases is not very costly compared to lung- and breast cancer with similar metastases. However, novel therapeutic options may dramatically increase treatment costs in the near future and proper head-to-head cost-effectiveness studies of all treatment modalities are therefore necessary.

PCN72

ECONOMIC IMPACT MODEL OF BREAST CANCER TREATMENT AT EARLY STAGES IN THE MEXICAN PUBLIC HEALTH CARE SECTOR

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OBJECTIVES: Nowadays breast cancer represents a great economic burden to public health care sector in Mexico. This economic burden is due by a lack of prevention campaigns and late diagnosis. The analysis aims to estimate the economic impact of standard treatment in Mexico for an optimistic scenario of 80% of all breast cancer population at early stages compared to the actual distribution (55%) of patients along the stages in Mexican setting. **METHODS:** A hypothetical patient cohort of 8765 was evaluated; this estimation was obtained from breast cancer 2011 prevalence in Mexican population. The analysis was developed in order to estimate average cost from the optimistic (base-case) versus actual scenario through public health care perspective. Distribution of population in the actual case scenario was 16%, 39%, 30% and 14% at each stage, I-IV respectively. Direct medical costs were extracted from a published source where through a micro-costing technique the cost at each stage was obtained. Costs are expressed in 2014 USD (\$1USD=\$13MXN). It is assumed that the economical difference between both scenarios will be used for prevention campaigns. **RESULTS:** The total cost of treatment for all patients on the actual scenario was \$124,261,716 compared to \$103,549,361 that was the cost calculated at the base-case scenario. Economic impact of optimistic scenario is 17% less than total cost of treatment at the current scenario. This difference, which represents \$20,712,355, could be reallocated to diagnose 32,689 more patients at early stages. A sensitivity analysis with a best-case scenario was developed considering 100% of the patients diagnosed during the first two stages where economic benefits were 314% higher than base-case scenario. **CONCLUSIONS:** This analysis suggests that if more public policies focused on breast cancer prevention were implemented, then it may lead to a more optimal reallocation of resources since direct medical costs increase at late stages.

PCN73

BURDEN OF PROSTATE CANCER AND FUTURE NEED FOR HEALTH CARE SERVICES

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OBJECTIVES: Prostate cancer is the most common cancer with a current incidence of 0,18% among the 2,6million Finnish men. Demand on health care resource use is dependent on number of patients needing the service. Patient volumes are increasing throughout Europe due to ageing of the population. Despite the stable or decreasing age-adjusted incidence rates, the absolute number of patients is growing. The population characteristics vary within geographical areas, and thus, using average parameters for the whole country would lead to biased estimates. In this study, burden of prostate cancer cases is estimated on municipality level throughout Finland. **METHODS:** Number of new cancer cases in different hospital districts (N=20) was extracted from the Finnish cancer registry. Official population statistics and forecast were used to identify the current and predicted age and sex distribution in all of the individual municipalities (N=320). The data were combined with Tableau (8.0) software, where a map-based interface was constructed. This was also utilized to visualize the population changes and patient forecasts. Similar methodology has been previously utilized in different cancer types. **RESULTS:** The number of new prostate cancer cases each year is estimated to be 1,5-fold by 2040. As a case example, a Finnish municipality with 135,000 inhabitants was chosen. There were 78 new prostate cancer cases among the 64,332 men in 2011, representing an incidence of 0,12%. According to our analysis, this university city with relatively young population would reach the current country average (0,18%) as late as 2040. **CONCLUSIONS:** The disease burden and population demographics are unevenly distributed across the country, and thus municipality level estimates are needed to inform local decision making and planning. Estimates on the absolute number of patients across relevant disease areas are required in order to prepare to the challenges health care systems are facing in the future.

PCN74

THE BURDEN OF NON-SMALL CELLS LUNG CANCER (NSCLC) IN FIRST LINE (1L) TREATMENT: PATTERNS OF CARE AND COST OF ILLNESS

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OBJECTIVES: Several treatment options are available for 1L NSCLC. In Brazil, patients with NSCLC have not been systematically evaluated and different management strategies may be associated to different economical outcomes. Therefore, we aimed to evaluate the patterns of care and cost of illness of 1L NSCLC treatment according to Brazilian supplementary health system. **METHODS:** Metastatic NSCLC patients receiving 1L treatment during year 2013 were eligible and selected from the private market administrative claims database (Evidências database). Treatments, demographics, supportive drugs and exams were evaluated. Name and any other personal identification were not available at the database. The most reported treatments according to generic name in 1L therapy were defined as patterns of care. The cost of illness was calculated by a bottom-up approach. Exams and associated drugs