Abstracts

PCN63

DIFFERENT TREATMENT PATTERNS COSTS IN METASTATIC BREAST CANCER (MBC) EXPOSED TO ANTHRACYCLINES AND TAXANES (ACT): A DIFFERENT PERSPECTIVE

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OBJECTIVES: In Mexico, breast cancer is the second cause of cancer mortality among females. For MBC patients resistant to AT, there are limited treatment options. There is a scarcity of data regarding clinical management of this population and on the treatment costs at this stage of the disease. The objective of this study was to estimate the cost of treatment patterns of care for MBC patients exposed to (AT) in the Mexican public health care sector. METHODS: Through medical chart review a retrospective cohort of 244 adult with advanced breast cancer patients resistant to AT was constructed. The period was January 2004 to December 2007. Target population data files were obtained from 600 patients out of 3 tertiary public hospitals in Mexico. Treatments reviewed included surgery, radiation, hormonal therapy and cytotoxic drug therapy RESULTS: Cytotoxic drug therapy was the treatment consuming the majority of resources (around 80% of total budget). Capecitabine, vinorelbine, ciclophosphamide were the most common prescribed agents. Clinical drug therapy manage- ment of the disease was notably different among the three hospitals in the sample. This difference translated into a disparity of prescription costs among the sites, ranging from US$8,700 to US$284 for 1st treatment. Further research is needed to explain this variety of treatment patterns, however an initial query based by expert opinion sug- gests that budget limitation among the hospitals is one of the main reasons. CONCLUSIONS: Chemotherapy treatment patterns and costs vary among the different hospitals. This study highlights a lack of standardized care for patients among hos- pitals and suggests that differences are not only a reflection of scarcity of scientific data and diversity of prescription preferences among physicians but also of economic restrictions. Ultimately, there is a clear unmet medical need that needs to be addressed through evidence based medicine alternatives that support efficacy and cost effective- ness treatments.

THE ECONOMIC BURDEN ASSOCIATED WITH METASTATIC COLORECTAL CANCER

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OBJECTIVES: To estimate total costs and assess primary cost drivers of treating newly diagnosed metastatic colorectal cancer (mCRC) after the introduction of biologic therapies. METHODS: Using a large claims database of 1 US nationally commercially insured population, patients with newly diagnosed mCRC were identified from 2004 to 2006. Patients were followed from initial mCRC diagnosis to either death, disenroll- ment, or December 31, 2006. Using methods from published literature, the follow-up period for each patient was divided into three phases: diagnostic, treatment, and death. Average costs for the three phases of disease were identified and assigned as inpatient, outpatient, emergency room (ER), or medication-related costs (including chemotherapy and biologic agents). RESULTS: A total of 23,222 newly diagnosed mCRC patients were identified. Outpatient care was the cost driver during the diag- nostic (42.6%) and treatment (51.7%) phases. Inpatient care represented 15.6% and 16.2% of costs in the treatment phase; and 12.1% and 11.7% of total costs across all phases of disease, respectively. CONCLUSIONS:

Inpatient and outpatient care were the key cost drivers in the medical management of mCRC. Biologics represented 16.2% of treatment phase costs and 11.7% of all costs incurred by mCRC patients across all phases of disease.

PCN65

COST OF FIRST LINE METASTATIC COLON CANCER CHEMOTHERAPIES IN HUNGARY

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OBJECTIVES: In Hungary, resources for anti-cancer chemotherapies are allocated from central budget, based on DRG accounts. The goal of current research was to investigate annual expenditures of first line chemotherapy protocols of metastatic colon cancer. Statistical patients, especially the contribution of monoclonal antibodies. METHODS: A total of 1496 patients’ cost data have been collected. Cost analysis of first line chemotherapy protocols has been conducted from the pers- pective of payer. Iritocetax, cetuximab, bevacizumab, capecitabine and oxaplatin containing regimens have been analysed for 12 consecutive months. RESULTS: Total expenditure of first line colon cancer chemotherapies was US$18.8 million for 12 consecutive months. Average cost per patient was US$12,539 for the investigated period. The share of patients, who have been treated by monoclonal antibodies con- taining regimens was 18.8%, while cost of biologicals contributed 35% of total first line chemotherapies. CONCLUSIONS: The contribution of monoclonal antibodies was relatively low in terms of treated patients in first line chemotherapy of colon cancer. Furthermore, average duration of all chemotherapies were lower than reported in clinical trials, resulting suboptimal administration and cumulative dose of anti- cancer compounds.

PCN66

COST OF ANTHRACYCLINE-INDUCED CARDIOTOXICITY AMONG U.S. BREAST CANCER PATIENTS

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OBJECTIVES: Costs associated with anthracycline-induced cardiotoxic events (CE) are not known. To compare cost associated with CE among three cohort groups: anthracycline-containing-chemotherapy (ACC), no-anthracycline-containing-chemotherapy (NACC), and no-chemotherapy (control) groups within a U.S. managed care database. METHODS: A retrospective cohort study was designed. Adult females (≥18 diagnosed with breast cancer between January 1, 2002 to December 31, 2005 index-period) were identified. Subjects with previous CE, breast cancer diagnosis, or anthracycline-use 12-months prior to index date were excluded. Index date was defined as the first claim date for chemotherapy for ACC and NACC cohorts, and the first non-chemotherapy medication claim date for controls. ACC and NACC were matched to controls by month of index date and year of birth. Total health care costs were extracted from medical and pharmacy claims and summarized at per patient per year level. Cost of subjects developed CE were extracted from medical and pharmacy claims and were adjusted by using a gamma distributed generalized linear model with a log link function. RESULTS: A total of 21,106 subjects were classified as ACC (n = 3,428), NACC (n = 7,125) and controls (n = 10,553). NACC cohort was significantly cheaper (56.6% (62 years ± 12.5) compared to ACC (53 ± 9.7) or control cohorts (59 ± 12.5). ACC cohort had a higher (p < .01) degree of comorbidity, (1.8 ± 0.8) com- pared to NACC (1.6 ± 0.9) or control (1.3 ± 0.8) as measured by Charlson comorbidity-index. At month 12 post index-date, 14% (n = 483) of ACC and 5% (n = 381) of NACC had CE compared to 3% (n = 310) of controls. At 12 month post index, the unadjusted mean total health care costs per patient were $59,287, $20,528 and $11,600, respectively. The adjusted total health care costs for subjects developed CE were $45,304,951, $17,727,884 and $11,591,263 for ACC, NACC and controls, respectively. (p < .01). CONCLUSIONS: Health care cost for the ACC cohort was significantly higher than the NACC or controls cohorts.

PCN67

THE COST OF WAITING: ECONOMIC BENEFIT OF REDUCING WAITING TIMES FOR EARLY BREAST CANCER RADIOTHERAPY

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OBJECTIVES: The purpose of this study is to determine the economic benefit, if any, of reducing waiting from the perspective of the Ontario health care system. METHODS: An investigation in the Canadian scientific and economics literature was conducted to determine the costs of assessment, diagnosis, treatment and follow-up of patients receiving care for a local recurrence. The risks associated with having a local recurrence, metastatic disease and terminal disease were also determined from the literature. The incremental cost of treatment was weighted according to the risk of each health event, and by the associated risk of recurrence due to radio- therapy delay. RESULTS: The cost of treating a recurrence, weighted according to risk of progression to more severe disease, was approximately $36,000 within the model. The associated incremental cost savings per week of waiting reduction was $7249. Sensitivity analysis was conducted around the estimate. CONCLUSIONS: The savings associated with avoiding one breast cancer recurrence is approximately $36,000 from the perspective of the health care system. Reducing waiting for radio-therapy by one week may save the health care system $72 per patient in downstream