BUDGETARY IMPACT OF XELOX IN COLORECTAL CANCER IN ITALY

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OBJECTIVES: To assess the budgetary impact of XELOX (combination regimen of Xeloda plus oxaliplatin) as a treatment option in colorectal cancer in Italy. METHODS: A matrix model was developed to estimate the budgetary impact of XELOX from the perspective of the health care purchaser in Italy in 2008. The analysis was performed for patients with colorectal cancer receiving 5-FU, FOLFOX-4 (or FOLFOX-6 or FOLFOX-6 modified), FOLFIRI, Xeloda (capecitabine), who are eligible for treatment with XELOX. Data sources used included published literature, official Italian price/tariff lists, and national population statistics. The analysis covers adjuvant therapy for colon cancer and 1st and 2nd line treatment in metastatic colorectal cancer (mCRC) over a 5-year time horizon. The perspective of the analysis was that of the NHS in Italy in 2008. RESULTS: The analysis shows that the total treatment costs decrease when XELOX is introduced as a treatment option in colorectal cancer. The introduction of XELOX leads to cost savings at the national level of €6.5 million over a period of years, when the FOLFOX regimen consists of FOLFOX-4. The use of XELOX leads to additional costs of €154 million for XELOX, but these costs are offset by cost savings for the other regimens and especially FOLFOX (€171 million) and FOLFIRI (€26 million). For FOLFOX-6 and FOLFIRI-6 modified the cost savings are respectively €52 and €22 million. Sensitivity analyses confirmed the robustness of the outcome of the model. CONCLUSIONS: The use of XELOX leads to a positive impact on the national drug budget in terms of costs savings in patients with colorectal cancer.

BUDGET IMPACT ANALYSIS OF THE CONTINUATION OF DOCETAXEL REIMBURSEMENT IN THE NEOADJUVANT THERAPY OF LOCALLY ADVANCED BREAST CANCER AND PALLIATIVE THERAPY OF METASTATIC BREAST CANCER IN POLAND

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OBJECTIVES: To estimate the impact on the budget of the Public Payer in Poland of the continuation of docetaxel reimbursement in the neoadjuvant therapy of locally advanced breast cancer (LABC) and palliative therapy of metastatic breast cancer (MBC) due to rising needs. METHODS: Analysis was performed from the public payers’ perspective (National Health Fund) in Poland. Two scenarios were compared: present and future. Docetaxel is reimbursed in Poland for patients who fulfill special requirements (limited reimbursement). In the “present scenario” it was assumed that the number of patients is equal to the number of patients treated in 2007 year. In the “future scenario” it was assumed that the target population for docetaxel treatment will increase in the following years 2008–2012 due to better patient diagnosis and increase in disease incidence. Two scenarios were compared: present and future.
over different combinations of patient weight and surface area. RESULTS: Savings of €3,404 per course per patient were shown; potentially saving the Italian health care system €7.67 million per year. This assumes that of the 2,252 third-line patients, 57% receive panitumumab and 43% receive Active Supportive Care in Year 1 based on the prevalence of the wild-type K-RAS mutation, compared with 100% receiving cetuximab. CONCLUSIONS: Results indicate that substantial savings are associated with panitumumab therapy over cetuximab therapy at national and per-patient levels.

A COST-EFFECTIVENESS ANALYSIS OF IXABEPILONE FOR BREAST CANCER AT A TERTIARY CANCER CENTER Lal LS, Maewal I, Miller LA, Smith WD, Arbuckle R University of Texas MD Anderson Cancer Center, Houston, TX, USA OBJECTIVES: This study evaluates the cost-effectiveness and the budget impact of ixabepilone, a new microtubule stabilizer for treatment of breast cancer, as part of the Formulary Management System at a major tertiary cancer center in the United States. METHODS: A decision analytical model was developed to estimate the incremental cost-effectiveness of ixabepilone for breast cancer, in patients who failed treatment with anthracycline and taxane. The model compared two strategies: combination therapy of ixabepilone with capecitabine compared to capecitabine alone. The outcome of interest was progression free life year (PFLY), based on published literature and clinical use estimates. Direct institutional medical costs for a one-year time period were utilized. One-way and two-way sensitivity analyses on the probabilities of disease progression were conducted. In addition, a budget impact analysis was also conducted for adding ixabepilone in the Formulary. RESULTS: Based on outcome estimates from literature and the application of the institutional costs, the cost per PFLY saved for ixabepilone for treatment of advanced breast cancer was $318,404. One-way sensitivity analysis on the efficacy probability (0–1.0) of the combination therapy indicated that ixabepilone’s cost-effectiveness ratios ranged from $205,000 to $1,190,000 per QALY. Other variables such as drug acquisition costs and the probability of response to the monotherapy is <33%, does the combination therapy become more cost-effective. The budget impact model showed that the institution will utilize about $7.39 million worth of ixabepilone annually based on acquisition costs.

ANALYSIS OF COSTS AND CONSEQUENCES IN CANCER PATIENTS RECEIVING CAPECITABINE Roth S1, Lehmann S1, Simons S1, Dietrich ES2, Ko Y1, Kuhn W1, Ruberg K1, Schwindt P1, Wolter H1, Jaehde U1 1University of Bonn, Bonn, NRW, Germany, 2TK Scientific Institute for Benefit and Efficiency in Health Care, Hamburg, Germany, 3Johanner Hospital, Bonn, NRW, Germany, 4University Hospital Bonn, Bonn, NRW, Germany, 5Kronen Apotheke Marxen, Wesseling, NRW, Germany, 6Oncology Practice, Bonn, NRW, Germany OBJECTIVES: The purpose of this study was to analyse the disease-related costs as well as the side effect hand-foot syndrome (HFS) in oncologic patients receiving capecitabine. HFS is a dose and therapy limiting toxicity which is classified into severity grades 1 to 3. METHODS: Between April 2006 and August 2007 an observational study was conducted in Bonn, Germany on two oncologic outpatient wards and three oncologic practices. Breast and colorectal cancer patients starting oral chemotherapy with capecitabine were included and followed for six months. They rated their HFS at the end of each capecitabine cycle. The HFS grades were transformed into utility weights obtained from an earlier study in our group. From the perspective of the German statutory health insurance the direct disease-related costs (outpatient costs for pharmacotherapy, oncologist visits, diagnostics and inpatient costs) were assessed in a microcosting approach and referred to 2008. RESULTS: Thirty patients (16 breast, 14 colorectal cancer) were included. Their mean HFS severity grade was 1.1 (SD 0.7, median 1.0, range 0 to 2.75) corresponding to a mean utility weight of 0.88 (SD 0.14, median 0.92, range 1.00 to 0.44). Seven patients showed a HFS grade 3 (utility weight: 0.34) at least in one capcitabine cycle. On average €18,305 (80.4% outpatient, 19.6% inpatient) were calculated per breast cancer patient and €25,863 (71.2% outpatient, 28.8% inpatient) per colorectal cancer patient. Concerning the outpatient treatment, costs for pharmacotherapy represented the highest matter of expense (96.0% breast, 95.0% colorectal cancer). CONCLUSIONS: In most patients HFS occurred in moderate severity. Nevertheless, 7 patients experienced HFS grade 3 affecting quality of life. Strategies to prevent this toxicity need to be developed. Especially costs for pharmacotherapy represent a cost-driving factor in this patient group indicating a need for strategies to optimize cost structure while containing or improving quality of treatment.

ESTIMATING THE COST SAVINGS FROM THE INTRODUCTION OF KRAS TESTING IN THE MANAGEMENT OF METASTATIC COLORECTAL CANCER (MCRC) PATIENTS RECEIVING PANITUMUMAB IN GREECE Papagianopoulou V1, Christodouloupolou A1, Bracco A1, Yfantopoulos 11 1University of Athens, Athens, Greece, 2Amgen Hellas, Athens, Greece, 3Amgen (Europe) GmbH, Zug, Switzerland OBJECTIVES: Panitumumab is the first fully human anti-EGFR monoclonal antibody to be approved as monotherapy for patients with wild type (wt) KRAS mCRC after failure of fluoropyrimidine-, oxaliplatin-, and irinotecan-containing chemotherapy regimens. This novel treatment approach is the beginning of a new era of personalised treatment whereby KRAS status is evaluated and only patients who are likely to respond (wt KRAS) receive treatment. The objective of this study was to evaluate the overall budget impact (BI) of the use of panitumumab versus testing KRAS and treating patients with wt KRAS in Greece. METHODS: To consider overall costs associated with panitumumab treatment versus testing KRAS status and treating only wt KRAS patients with panitumumab, a decision analytic model was developed to evaluate BI. Primary drug costs, concomitant medications, infusion costs, radiation therapy, clinic visits, and hospitalisations were included in treatment costs. An expert panel was employed to map mCRC patient flow as a local cancer registry was not available. In this analysis, cost calculations for the public and private sectors were conducted separately. RESULTS: Out of 470 potentially eligible patients for panitumumab monotherapy, the decision analytic model targets 268 (57%) patients with wt KRAS, according to indication. Potential total cost of receiving panitumumab without taking KRAS status into consideration was €8.4 million in the public sector, while total cost including KRAS testing to all patients but...