clinical outcomes and medical resource utilization (MRT) derived from the phase III ML17032 study. Direct medical costs associated with trial-based MRT were based on Taiwan’s National Health Insurance fee schedule for 2007. Costs associated with intravenous chemotherapy administration and adverse event (AE) management were estimated by an expert panel survey conducted among 12 oncologists. One-way sensitivity analyses were performed on key model parameters by varying the input values by ±20%. RESULTS: A trend toward superior progression-free survival was observed in the XP arm (median 5.6 months for XP vs. 5.0 for FP). Patients in the XP arm received 5.2 cycles of therapy vs. 4.6 cycles of FP. Compared to FP, administration of XP required fewer consults per patient (5.2 for XP vs. 22.8 for FP). Chemotherapy drug cost was higher (US$1712) in the XP arm; however, these cost increments were offset by differences of chemotherapy administration costs (US$4376) between two arms. AE profiles were similar and the cost associated with grade 3/4 AE management were slightly lower (US$30) in the XP arm. Overall, XP was associated with a cost saving of USD$2691 (NT$87,351). XP remained cost-saving under one-way sensitivity analyses. CONCLUSION: From the Taiwan BNIH (both) perspective, this CMA demonstrates that replacing FP by XP for the treatment of AGC would not only save direct medical costs but also improve health outcomes in Taiwan.

PCN37 PRELIMINARY COST-CONSEQUENCE ANALYSIS OF EPIRUBICIN/CISPLATIN/5FU (ECF) COMPARED TO EPIRUBICIN/CISPLATIN/CAPECITABINE (ECX) IN PATIENTS WITH ADVANCED OEosphagogastric cancer
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OBJECTIVE: To undertake a cost-consequence analysis of direct medical costs in the treatment of advanced oesophagogastroduodenal cancer based on the REAL 2 randomized clinical trial, which demonstrated non-inferiority when oral capecitabine was substituted for infusional 5FU as part of the standard regimen. ECF. METHODS: Direct medical costs (2007 CDN$) from the perspective of the Canadian public health system were applied to resources (e.g., study treatment, toxicity management) obtained from REAL 2 trial data available in the public domain. Complete drug delivery was assumed. Mean overall costs per patient were estimated over six cycles, corresponding to treatment duration. RESULTS: The mean total cost per patient treated with ECF was $9065 and $9268 for ECX. The major driver of cost in the ECX arm is chemotherapy drug, $5472 for capecitabine versus $2400 for infusional 5FU (6 cycles). This is offset by the cost of chemotherapy administration, $1551 for ECF compared to $671 for ECX, and central venous access costs, $1230 for ECF. Additional line complication and hospitalization data were not available and therefore not included in these estimates. Limited data on toxicity management, (e.g. febrile neutropenia, anemia, thrombocytopenia), are available, and cost estimates are $2955 for ECF and $2433 for ECX-treated patients. CONCLUSION: ECX has similar efficacy to ECF in the REAL 2 trial, but has potential advantages in terms of patient preference and convenience of an oral therapy. In addition, oral therapy decreases hospital resource consumption. While drug costs for ECF are greater, costs for chemotherapy administration and line-related costs are substantially less, and underestimated in this analysis. Substituting capecitabine for infusional 5FU in the ECF regimen is an attractive and affordable alternative for patients with advanced oesophagogastroduodenal cancer.

PCN38 THE IMPACT OF BREAST CANCER CARE DEVELOPMENT ON MEDICAL AND ECONOMICAL OUTCOMES IN A TOTAL SOCIETAL COST CONTEXT
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OBJECTIVE: In Finland, the overall costs of breast cancer management have increased, primarily during the last years by the launch of expensive pharmaceutical therapies (trastuzumab in 2000). Economical reasons may therefore play a part in the prescribing of new drugs. We analyzed with comprehensive time series of all expenditures the effectiveness of pharmaceutical developments and other interventions from 1987 to 2005. METHODS: Finnish registry based data from 1987 to 2005 was combined to evaluate all costs related to the care of breast cancer. These included comprehensive health care costs, sick-leave compensations, disability pensions, and loss of productivity; all converted to 2004 euros. Several scenarios were thereafter constructed to identify the important changes in care processes and cost drivers during this period. RESULTS: During the observation period, the number of patients with breast cancer (5-year survival prevalence) increased by 100% up to 17,000 patients and the overall expenditure of care more than doubled from €70 to €160 million. The health care costs increased by 150% and the cumulative costs per patient increased from €4500 to €5500. The cost of medications has escalated with an overall increase of 660%, mostly during 2000’s. However, during this period, the effectiveness of the treatment has increased as breast cancer related deaths, in-hospital days and loss of productivity due to premature deaths have decreased significantly. Altogether, our scenarios showed that new medications have had a beneficial financial impact of 16–35 million € for the society during the study period. CONCLUSION: Comprehensive assessment of large patient cohorts and long term economical outcomes is a useful method for evaluation of outcomes in chronic diseases. Identification of different cost drivers is needed as the cost of new interventions is increasing and their benefits should ideally be assessed in relation to their broader societal influence.

PCN39 DIFFERENCES IN COLORECTAL CANCER TREATMENT COSTS BY TREATMENT PHASE, CANCER SITE, AND STAGE AT DIAGNOSIS: EVIDENCE FROM LINKED SEER-MEDICARE DATA
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OBJECTIVE: This study provides updated, in-depth estimates of colorectal cancer (CRC) treatment costs. METHODS: This retrospective cohort study included patients aged ≥65 years, who were recently diagnosed with colon (CC) or rectal (RC) cancer in a SEER registry between 1996 and 2002 (n = 60,916) and 1:1 matched (by age, sex, geographic region) non-cancer comparison patients from a 5% Medicare sample. We assigned costs to phases as follows: 1) initial: costs in the period up to one year after diagnosis among patients with ≥13 months survival; 2) continuing: costs in the years between the initial and terminal years among patients with ≥36 months survival; and 3) terminal: costs in the final year of life. Terminal costs were assigned first (all costs considered terminal for patients who lived <13 months). Costs reflect all provider payments for cancer patients in excess of those for matched comparison patients (2006 US
Dollars). RESULTS: Cancer-related CRC costs averaged $32,303 in the initial phase, $3,548 per year in the continuing phase, and $14,323 in the terminal phase. Initial-phase costs were similar by site (CC: $32,328; RC: $31,701; P = 0.015), while continuing-phase costs were roughly 1.3 higher for RC versus CC ($4,266 vs. $3,287; P < 0.001). Terminal-phase costs were $14,197 for CC and $14,654 for RC (P = 0.424). Initial-phase CC costs were $17,278 and $40,501 for Stages 0 and 4, respectively (P < 0.001), compared to $14,060 and $37,235 for Stage 0 and 4 RC (P < 0.001). Continuing costs ranged from $2,499–$17,861 and $2,822–$17,741 for Stage 0–4 CC and RC patients, respectively; terminal costs ranged from $7,814–$27,742 for Stages 0–4 CC and $6,376–$20,047 for Stages 0–4 RC patients. CONCLUSION: Excess costs associated with CRC are striking and vary considerably by treatment phase, cancer site, and stage at diagnosis. Interventions aimed at earlier diagnosis and prevention have the potential to reduce cancer-related health care costs.