COST ANALYSIS OF CAPECITABINE VERSUS 5-FU/LV FOR COLORECTAL CANCER PATIENTS IN THE NETHERLANDS

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OBJECTIVE: To estimate incremental costs of capecitabine versus 5-fluorouracil/leukovorin (5FU/LV) for Dutch colon-rectal cancer patients. Treatment with capecitabine reflects a new chemotherapy for patients with colorectal cancer. Oral capecitabine has a major advantage over the current treatment with intravenous 5-FU/LV (Mayo-protocol), as it may be used at home. Furthermore, capecitabine seems to have a better safety profile than 5FU/LV. Capecitabine may be applied both in the palliative and the adjuvant setting. METHODS: We used cost analysis to estimate the pharmaco-economic profile of capecitabine. This pharmaco-economic technique is justified as effectiveness may be assumed similar for both treatments. Costs in the analysis relate to extra drug costs of capecitabine over 5FU/LV. Benefits of capecitabine relate to reduced costs for outpatient hospital administration of 5FU/LV, for travel hence and forth and for treatment of side effects of chemotherapy. Files of 63 colorectal-cancer patients recently treated in the Isala Clinics (Zwolle, Netherlands) were investigated to assess numbers of outpatient visits for 5FU/LV administration, health-care and medications for adverse-effects and travel time. Risk reductions for adverse-effects of 5FU/LV were drawn from the literature. Costing was done using prices listed in the Dutch guideline for pharmaco-economic research. RESULTS: At the current market price, which is almost fourfold that of 5FU/LV per treatment, oral capecitabine is cost-saving compared to intravenous 5FU/LV. Costs per treatment for capecitabine were 15–25% below those for 5FU/LV, both in palliative and adjuvant settings. This result was robust in sensitivity analysis, with a 10% decrease in costs as the minimum. Cost reductions primarily relate to a decrease in hospital costs for administering 5FU/LV. CONCLUSIONS: Treatment with oral capecitabine may be cost saving for Dutch colorectal patients. Furthermore, increases in quality-of-life related to treatment in the home rather than the hospital setting may be expected.