CMF (cyclophosphamide 600 mg/m², methotrexate 40 mg/m², fluorouracil 600 mg/m²) in 19 women or FAC (fluorouracil 500 mg/m², doxorubicin 50 mg/m², cyclophosphamide 500 mg/m²) in 42 women. Altogether 61 women were included into study. Frequency and gradus of unwanted effects were measured during five days after one arrival for the treatment. Neutropenia was measured by counting white blood cells 18–20 days after chemotherapy. Diarrhoea, nausea and vomiting were graduated by counting of number of episodes per day for five days after each treatment. For each protocol the costs of treatment for cytostatics as well as for treatment of unwanted effects and need for prolonged hospitalisation were calculated. RESULTS: There was a higher incidence of nausea, vomiting and neutropenia in FAC vs. CMF treatments (73.81%, 23.57%, 21.43% vs. 57.98%, 15.79%, 10.53%) and higher incidence of diarrhoea in CMF vs. FAC treatments (5.68% vs. 2.38%). Anthracycline-based protocols (FAC) caused greater severity of nausea, vomiting and diarrhoea than CMF with equaly severe neutropenia. Drugs used for treatment of nausea, vomiting and neutropenia were setrons, corticosteroids and metoclopramide. The cost for the one treatment episode for cytostatics were higher for FAC (66.94 EU pre single dose, 401.64 EU for the whole cycle) than for CMF (19,10 EU per single dose, 229.20 EU for whole cycle). The costs of drugs used for the treatment of AEs were 13.20 EU/patient/episode reciving CMF and 17.24 EU/patient/episode reciving FAC protocol. CONCLUSIONS: CMF is safer and cheaper than FAC protocol.

EXPLORATORY COST EFFECTIVENESS ANALYSIS OF BEVACIZUMAB IN ADDITION TO FOLFOX-4 IN THE ADJUVANT TREATMENT OF STAGE III COLON CANCER: A UK PERSPECTIVE

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OBJECTIVES: To predict the expected incremental costs and mean life-years associated with adding bevacizumab to FOLFOX4 in the adjuvant treatment of patients with AJCC/UICC stage III colon carcinoma following surgical resection. METHODS: A three-health state (disease-free survival [DFS], relapse/new occurrence of colon carcinoma, and death) Markov model was used to explore the effects of adding one year of adjuvant treatment with bevacizumab to the existing adjuvant FOLFOX4 treatment regimen. Baseline DFS for FOLFOX4-treated patients was based on published data from the MOSAIC trial (André et al 2004). The relative risk reduction for bevacizumab was based on protocol assumptions for the ongoing phase III AVANT study. Outcomes included life-years, QALYs, direct costs, and incremental cost-effectiveness ratios (ICERs) expressed as costs per QALY or life-year gained. A life time horizon (40
ECONOMIC EVALUATION OF TRASTUZUMAB FOR THE ADJUVANT TREATMENT OF HER2 POSITIVE EARLY BREAST CANCER IN THE NETHERLANDS

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OBJECTIVES: To obtain a Dutch cost-effectiveness estimate of trastuzumab in early breast cancer, based on a previous UK model-based cost-effectiveness analysis. Trastuzumab is a humanized monoclonal antibody against the HER2-receptor extracellular domain. METHODS: Following the model transferability assessment, required adjustments were made. In a Markov cohort model, 1 year adjuvant trastuzumab therapy was compared to observation. Model outcomes are life years, quality-adjusted life years (QALYs), health care costs, and cost of productivity loss. The cycle length is one year, the time horizon is lifetime. UK prices were replaced by updated Dutch unit prices. Clinical input data originated from the HERA-trial; health utilities were obtained from literature. The impact of parameter uncertainty was assessed using age subgroup analyses, one-way sensitivity analyses and probabilistic sensitivity analysis. Subsequently, we conducted expected value of perfect information analyses. RESULTS: In The Netherlands, from a health care perspective the ICER for trastuzumab for a 55 year old patient was estimated at €19,463/QALY. From a societal perspective the ICER became €14,867. As expected, ICERs improve with younger age. Sensitivity analyses showed that the ICER was sensitive to the time horizon and the costs for the metastatic health state. CONCLUSIONS: Overall the Dutch cost-effectiveness estimate of trastuzumab for early stage breast cancer can be well described and is well below the Dutch informal threshold of €80,000/QALY. For the base case analysis the probability that the ICER is acceptable for thresholds above €27,000/QALY is 1, indicating a probability of zero for a wrong decision. Hence, for thresholds above €27,000 the expected value of information is zero. This analysis provided an early cost-effectiveness indication of trastuzumab in the adjuvant setting in The Netherlands and has led to the proportional reimbursement. The transferability assessment is addressed in a separate abstract.