

years) was used; after 8 years, patients were assumed to only be at risk for death. Costs and outcomes were discounted at 3.5% per annum. Sensitivity analyses were performed to identify influential parameters in the model. **RESULTS:** Undiscounted mean life expectancy for patients treated with FOLFOX4 was estimated at 15.9 years. Assuming the addition of bevacizumab reduces the risk of relapse by 23% in the first 3 years after surgery, as described in the protocol, and by 10% in the following 5 years, mean survival was estimated to increase to 18.1 years (10.8 to 12.1 years when discounted). The discounted ICER was £19,939/life year gained. Sensitivity analysis showed that assumptions relating to the magnitude of the relapse risk reduction and the duration of risk reduction were the most critical determinants of the ICER. **CONCLUSIONS:** Addition of bevacizumab to FOLFOX4, the current standard regimen for patients with stage III colon carcinoma, is expected to improve clinical outcomes and to be a cost-effective treatment option from a UK perspective.

PCN40

COST-EFFECTIVENESS OF TREATMENT WITH TRASTUZUMAB IN PATIENTS WITH EARLY BREAST CANCER FROM THE PORTUGUESE SOCIETAL PERSPECTIVE

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OBJECTIVES: The purpose of this study is to estimate the cost-effectiveness (CE) of 1-year trastuzumab treatment *versus* standard care (observation following standard adjuvant chemotherapy) in early stage breast cancer (eBC) patients in Portugal. **METHODS:** A 5-state Markov model with annual transition cycles was developed to estimate the long term health and economic outcomes of eBC patients based on HERA clinical trial results. The model included the following health states: disease free survival, recurrence, metastasis, cardiac events and death. The model assumes a hypothetical patient cohort similar to those of HERA study. The evaluation assumes both the health care payer and societal perspectives. Portuguese NHS resource use and costs were estimated from a consensus experts panel and published unit costs, respectively, including cancer therapy costs, adverse cardiovascular events treatment costs, disease diagnosis and management costs and indirect costs (time off of work). Outcomes were discounted at 3% *per annum*. One-way sensitivity analysis was performed on the discount rate, quality of life estimates and non-trastuzumab treatment costs. **RESULTS:** Treatment with trastuzumab was estimated to increase discounted life expectancy by 2.11 in years (14.95 *vs* 12.84) and quality-adjusted life expectancy by 2.01 QALYs compared to standard care. Direct and indirect costs were projected to be €61,839 and €19,759 with trastuzumab and €40,559 and €25,391 with standard of care. These results corresponded to ICERs of €10,067 and €10,595 assuming direct costs only and of €7789 and €7400 including indirect costs, per life year gained (LYG) and per QALY gained, respectively. **CONCLUSIONS:** The 1-year trastuzumab use as adjuvant therapy in HER-2 positive eBC patients improves survival and can be considered a cost effective therapy with a high degree of certainty in the Portuguese setting.

PCN41

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 provisional reimbursement. The transferability assessment is addressed in a separate abstract.

PCN42

A SENSITIVITY ANALYSIS ON THE COST UTILITY OF BEVACIZUMAB, CAPECITABINE, AND OXALIPLATIN COMPARED WITH FOLFOX FOR THE TREATMENT OF METASTATIC COLORECTAL CANCER (CRC): A UK PERSPECTIVE

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OBJECTIVES: Bevacizumab recently received a revised marketing authorisation for use in CRC that states "Bevacizumab in combination with fluoropyrimidine-based chemotherapy is indicated for treatment of patients with metastatic carcinoma of the colon or rectum". This means that bevacizumab can be used in combination with a wider choice of therapies than previously allowed. This revised indication was based on the NO16966 phase III trial, which evaluated the efficacy of bevacizumab in combination with capecitabine + oxaliplatin (XELOX). **METHODS:** A health state transition model was constructed to estimate patient survival, stratified between progression-free sur-