with a 10-year follow-up, an adjuvant therapy with Herceptin® would avoid 49.7 loco-regional recurrences, 179.5 distant recurrences and 133.4 deaths. Incremental cost-utility ratio of Herceptin® was €18,282/QALY gained at lifetime horizon, which is well below the commonly accepted threshold of €45,000/QALY gained. **CONCLUSIONS:** Utilization of Herceptin® as an adjuvant therapy in patients with primary HER-2 positive breast cancer improves patient survival with an acceptable cost-utility ratio in the French setting.

PCN40

COST EFFECTIVENESS OF RITUXIMAB PLUS CVP IN PREVIOUSLY UNTREATED INDOLENT NON-HODGKIN'S LYMPHOMA

Maturi B[1], Tong W[2], Gyldmark M[3], Creeden J[3], Aultman R[3], Jost FJ[3]
[1]Hoffmann-La Roche Limited, Mississauga, ON, Canada, [2]McMaster University, Hamilton, ON, Canada, [3]F. Hoffmann-La Roche Ltd, Basel, Switzerland

OBJECTIVES: To estimate the cost-effectiveness of rituximab plus cyclophosphamide, vincristine, and prednisone (RCVP) compared to CVP alone in previously untreated NHL patients with advanced follicular lymphoma from a Canadian perspective. **METHODS:** A cost-utility analysis was performed from a Ministry of Health perspective over a 10-year time horizon using a Markov health state transition model. All patients (mean age 53 years) enter the model in a progression-free health state. Survival was estimated from Kaplan-Meier curves from a published phase III trial of RCVP versus CVP in patients with stage III or IV follicular lymphoma (median follow-up 31 months) and data from the Scotland and Newcastle Lymphoma Group (SNLG) registry using a line of best fit approach. Utilities for quality of life were assessed using the EQ-5D in a population of NHL patients from the UK. Direct annual medical costs including drug acquisition, administration and preparation were estimated from published sources. All costs are reported in 2005 CAD. Costs and outcomes were discounted at a rate of 5%. In order to address uncertainty in point estimates, one way sensitivity analyses were also performed. **RESULTS:** The addition of rituximab to CVP resulted in an additional 1.3 years of progression free survival and 0.58 quality adjusted life years (QALYs) over CVP alone. The cost of RCVP therapy was $43,445 compared to $22,891 for CVP. The incremental cost-utility ratio was $35,753/QALY. Results from one-way sensitivity analyses ranged from a low of $22,079/QALY to a high of $55,338/QALY. **CONCLUSION:** The addition of rituximab to a regimen of CVP represents a cost-effective treatment alternative in previously untreated NHL patients according to conventionally accepted ratios.

PCN41

COST-EFFECTIVENESS OF TAC VERSUS FAC FOR THE TREATMENT OF NODE POSITIVE BREAST CANCER IN THE ADJUVANT SETTING

Fonseca M[1], Araujo G[1], Saad E[2], Uehara R[3]
[1]Axia. Bio Consulting, São Paulo, Brazil, [2]Dendrix, São Paulo, Brazil, [3]Sanofi Aventis, São Paulo, Brazil

OBJECTIVES: The TAC adjuvant chemotherapy regimen compared to FAC improves the disease free survival (DFS) and overall survival (OS) rates significantly in women with operable node positive breast cancer, but the cost-effectiveness of this better efficacy was not evaluated. **METHODS:** We developed a model describing the clinical history of women with node positive breast cancer that projected improvements in lifetime quality adjusted life years (QALY), long-term costs, and cost-effectiveness of the adjuvant treatment TAC compared to FAC. The base case was a 50 years old woman with unilateral node positive breast cancer submitted to mastectomy and without metastasis. Transition probabilities came from the BCIRG 001 study and other major studies; the quality of life for each health state was based on the medical literature. The local management and costs of each health state was based on a Delphi panel according to the private health care perspective. Outcomes were discounted at 3% annually. Sensitivity analyses and a second order Monte Carlo simulation were performed. **RESULTS:** The lifetime horizon analysis showed: DFS of 32.5% and 29% and OS of 38% and 33%, for TAC and FAC, respectively; TAC increased life expectancy (LY) in 1.20 years and in quality adjusted life years (QALY) there was a 1.08 year gain, in comparison to FAC; the incremental cost per QALY was R$9476.92; the FAC group expense in the metastasis state, in fifteen years, was bigger than the whole cost for the treatment of recurrence states, for a whole life, with TAC; the Monte Carlo simulation showed that TAC is cost-effective 98% of the times and is cost-saving 18% of the times. **CONCLUSION:** Improvements in DFS and OS with adjuvant TAC regimen in women with operable node positive breast cancer improves patient outcomes in terms of LY and QALY with an acceptable cost-effectiveness ratio in Brazil.

PCN42

COST EFFECTIVENESS OF FULVESTRANT AS AN ADDITIONAL ENDOCRINE STEP IN THE TREATMENT SEQUENCE FOR HORMONE RESPONSIVE ADVANCED BREAST CANCER

Hirsch MW[1], Gait C[2], Chambers J[2]
[1]AstraZeneca UK Ltd, Macclesfield, Cheshire, UK, [2]Mapi Values Ltd, Macclesfield, Cheshire, UK

OBJECTIVES: Fulvestrant (Faslodex) is a well-tolerated estrogen receptor antagonist that is at least as effective as anastrozole in patients who have progressed or recurred on tamoxifen. A health economic model was developed to estimate the incremental cost per quality adjusted life year (QALY) gained when fulvestrant is included as an additional endocrine therapy step for postmenopausal women with hormone receptor positive (HR+) advanced breast cancer (ABC). **METHODS:** A seven-state Markov model was developed from a UK NHS perspective. This followed patients over their treatment for ABC, simulated over a 10-year time horizon. The model compared the costs and benefits of two cohorts of patients—one with and one without the addition of fulvestrant to the endocrine treatment sequence. Clinical data were collated from published trials. Resource utilization data were obtained from published literature and a survey of five UK physicians. Unit costs were taken from published sources. Each Markov cycle lasted 28 days. Major assumptions were validated via a survey of seven UK physicians. Costs and benefits were discounted at 3.5%. The robustness of results was tested using a probabilistic sensitivity analysis. **RESULTS:** In a cohort of 1000 postmenopausal women with HR+ ABC, the model suggested that a treatment sequence with fulvestrant as a third endocrine therapy step leads to a gain of 41 QALYs at an additional cost of ≤69,910, as compared to a sequence without fulvestrant. The estimated incremental cost-effectiveness ratio (ICER) of including fulvestrant in the endocrine treatment sequence was ≤1705 per QALY. Cost-effectiveness acceptability curves indicated over a 70% probability that the cost per QALY gained would be lower than ≤20,000, a commonly accepted UK threshold for cost-effectiveness. **CONCLUSIONS:** Based on this economic model, the use of fulvestrant as an additional endocrine therapy step in the treatment of HR+ ABC is a cost-effective treatment strategy.