

appears to be cost-effective in patients receiving chemotherapy for lung cancer.

PCN11

PHARMACOECONOMIC ANALYSES OF ERLOTINIB COMPARED WITH BEST SUPPORTIVE CARE (BSC) FOR THE TREATMENT OF RELAPSED NON-SMALL CELL LUNG CANCER (NSCLC) FROM THE CANADIAN PUBLIC HEALTH CARE PERSPECTIVE

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OBJECTIVE: Pharmacoeconomic assessment of erlotinib (Tarceva) vs best supportive care (BSC) for the treatment of relapsed NSCLC conducted as part of the Canadian reimbursement submission. **METHODS:** Analyses were conducted from the perspective of the Canadian public health care system, and included cost-effectiveness (CE) of erlotinib vs BSC. The decision analytic model included three health states (progression-free, progression and death) with a time horizon of 24–36 months. The model is a straight forward calculation of the area under the curve for time spent in the progression-free and progression health states. The model structure follows the disease pathway for NSCLC patients and the outcomes captured in the clinical trials. Cost components included drug acquisition, physician visits, hospitalizations, laboratory and diagnostic tests/procedures. Deterministic sensitivity analyses were performed. **RESULTS:** Incremental CE ratio at 3 years discounted at 5% is Can \$71,018/Life Year Gained vs BSC. During the reimbursement submission process the Common Drug Review (CDR), and subsequently the Ontario provincial Ministry of Health (MoH) questioned whether erlotinib should be restricted to certain subgroups (i.e. adenocarcinoma histology or HER1/EGFR-positive groups). However, the pivotal BR.21 erlotinib trial showed an overall survival benefit in an unselected patient population (56% HER1/EGFR status unknown). As all BR.21 molecular subgroup analyses were exploratory and underpowered, tests of interaction did not identify a molecular subgroup with a better survival when treated with erlotinib that was statistically significant. In particular HER1/EGFR protein expression was not found to impact on survival in the BR.21 trial. Based on these data, the CDR and MoH in Ontario subsequently confirmed subgroup-specific CE analyses were not required. **CONCLUSIONS:** Erlotinib received positive recommendations from the CDR. Ontario, British Columbia, Quebec, Nova Scotia and Newfoundland are provinces currently reimbursing erlotinib from their provincial drug plans.

PCN12

COST EFFECTIVENESS OF ERLOTINIB IN THE TREATMENT OF ADVANCED NON SMALL CELL LUNG CANCER (NSCLC) IN POLAND

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OBJECTIVES: The aim of the study was to evaluate the cost-effectiveness of erlotinib compared to docetaxel and pemetrexed after failure of previous treatment for stage IIIB/IV NSCLC in Poland. **METHODS:** Markov health-state model was used to estimate the direct medical costs and outcomes (overall survival and QALY) of treating NSCLC in the Polish setting. This model

incorporates clinical data from published pivotal trials and local data of health care resource utilisation and unit cost. The perspective of health care payers and time horizon of 3 years was considered. Probabilistic sensitivity analysis was used to address uncertainty. **RESULTS:** There were no differences between treatments with respect to overall survival (0.83 year) and the number of QALY—0.26 (erlotinib and pemetrexed) and 0.24 (docetaxel). The expected average costs/patient treated with erlotinib, docetaxel and pemetrexed were: 51,743, 78,039, 92,385 PLN (1 EURO = 3.8 PLN in 2006). Hence erlotinib dominates both docetaxel and pemetrexed (at least equal efficacy and lower cost). The average cost saving associated with erlotinib treatment vs. docetaxel and pemetrexed was 26,295 and 40,642 PLN/patient, respectively. Probabilistic sensitivity analysis confirmed results of the deterministic analysis. In a 100% simulation erlotinib remained a dominant treatment strategy in comparison to docetaxel and pemetrexed. **CONCLUSIONS:** Given the results of the analysis erlotinib as 2nd/3rd line agent in the treatment of patients with advanced NSCLC may be recommended as first-choice treatment because of its cost-saving potential in comparison to docetaxel and pemetrexed.

PCN13

COST-EFFECTIVENESS OF ADJUVANT CAPECITABINE, MAYO CLINIC AND DE GRAMONT REGIMENS FOR STAGE III COLON CANCER IN THE FRENCH SETTING

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OBJECTIVES: The oral fluoropyrimidine capecitabine is as effective but better tolerated than i.v. 5-FU/LV as first-line treatment in patients with metastatic colorectal cancer. Costs associated with the administration route could vary widely according to national rules and medical practice. We compared costs and outcomes of capecitabine, Mayo Clinic and de Gramont regimens as adjuvant treatment for stage III colon cancer. **METHODS:** We assessed the cost-effectiveness of the three regimens using the French third-party payer perspective, time horizon and efficacy/safety data (adjusted for indirect comparisons) from two published clinical trials [Twelves et al. N Engl J Med 2005; Andre et al. J Clin Oncol 2003]. Medical resource use and related-cost of chemotherapy and side-effect treatment were estimated from the clinical trials and expert opinion. Only grade 3/4 adverse events were considered when comparing capecitabine to the de Gramont regimen. We applied French standard costs to resources consumed and evaluated cost-effectiveness using relapse-free survival as an efficacy indicator. One-way sensitivity analyses were performed varying the cost estimates for each treatment. **RESULTS:** Capecitabine-treated patients had a mean life duration increase without treatment failure of 1.3 months vs. Mayo (35 months vs. 33.7 months). De Gramont was considered as effective as Mayo. In the base-case analysis, capecitabine is less costly than the Mayo Clinic (€3961.04 vs. €10,985.66) and de Gramont (€3697.05 vs. €7266.06) regimens. Capecitabine appeared to be dominant, more effective and less costly than either of the 5-FU regimens. In the sensitivity analyses, capecitabine remained dominant except for the minimum costs scenario vs. de Gramont. In this case, the cost-effectiveness ratio was estimated at €4511.36 per year without relapse. **CONCLUSIONS:** As adjuvant treatment for colon cancer, capecitabine decreases medical resources consumed, mainly in hospitals. Its approval in this setting is expected to bring cost savings and better outcomes.