OBJECTIVES: Mantle cell lymphoma (MCL) is an aggressive subtype of non-Hodgkin's lymphoma (NHL) with a poor prognosis. Approximately 6% of incident NHL cases are MCL. Following initial treatment, relapsed MCL patients have a median survival of 23 months. In 2008, Health Canada approved bortezomib for relapsed MCL patients. Although there is no standard treatment for relapsed MCL, a Canadian physician survey indicated FCM (fludarabine, cyclophosphamide, mitoxantrone) was a commonly used chemotherapy regimen. Rituximab-containing regimens are considered to be non-routine regimens because rituximab re-treatment was not uniformly accepted. However, the FCM regimen was accessible across Canada. The objective was to evaluate the cost-effectiveness of bortezomib versus FCM. METHODS: The Pinnacle model was a single-arm, non-randomized model evaluating bortezomib in relapsed MCL patients. Most of these patients had received rituximab previously, and therefore provided rationale to support using a non-rituximab regimen as a comparator. Published literature identified one relevant FCM study. A five-year time horizon was selected as most patients were at this point deceased. Costs and benefits were discounted by 5% and a provincial Ministry of Health perspective was taken. The overall survival for bortezomib was projected based on the Pinnacle study. Health utilities were obtained from a published study on aggressive NHL. Resource use included costs of drugs, intravenous administration and supportive care events. The survival curve was modeled in both the chemotherapy and FCM groups using standard chemotherapy comparators, including fludarabine regimens, which were validated from a cohort of patients from the British Columbia Cancer Agency. This ensured the FCM data in the analysis was not an underestimation of actual practice results. RESULTS: The total costs associated with bortezomib ($50,564) and FCM ($5,059) per patient. Results were most sensitive to the amount of bortezomib used and the survival of these patients. CONCLUSIONS: Bortezomib is an approved and cost-effective option in these difficult to treat patients.

OBJECTIVES: To estimate the incremental cost-effectiveness of bortezomib (BTZ) compared with lenalidomide plus dexamethasone (LEN-DEX) and dexamethasone (DEX) for the treatment of relapsed/refractory multiple myeloma in the Nordic countries. METHODS: The model was based on a ‘partitioned survival analysis’ that allows survival data to be decomposed into three states 1) alive before disease progression; 2) alive after progression; and 3) dead. The effects of treatment on time to progression (TTP), overall survival (OS) or death were obtained from published reports of the randomized controlled trials. Health utilities were obtained from a published study on aggressive NHL. Resource use included costs of drugs, intravenous administration and supportive care events. The survival curve was modeled in both the chemotherapy and FCM groups using standard chemotherapy comparators, including fludarabine regimens, which were validated from a cohort of patients from the British Columbia Cancer Agency. This ensured the FCM data in the analysis was not an underestimation of actual practice results. RESULTS: The total costs associated with bortezomib ($50,564) and FCM ($5,059) per patient. Results were most sensitive to the amount of bortezomib used and the survival of these patients. CONCLUSIONS: Bortezomib is an approved and cost-effective option in these difficult to treat patients.

OBJECTIVES: To evaluate the cost and clinical outcomes of rituximab (R) added to first line chemotherapy vs. chemotherapy in patients with chronic lymphocytic leukemia (CLL) in Poland. METHODS: A three health state transition model was developed to evaluate the cost-effectiveness of treating patients with either chemotherapy (fludarabine plus cyclophosphamide; FC) or R + FC. Patient level data were obtained from the pivotal study CLL-8 (Hallek et al., 2008). As chlorambucil (C) is a frequently used drug in Poland, an indirect comparison of R-C vs. C was included (patient data were obtained from the CLL-4 study, Catovsky et al. 2007). Patients were classified in the progression-free (PF) state with transitions to progressive disease or death. Costs and effects were discounted using a Polish Health Technology Assessment perspective. RESULTS: Mean total costs per patient were higher for FC vs. FC, however the incremental cost-effectiveness ratios (ICERs) were $71,145 PLN/LYG and $66,730 PLN/QALY respectively. Results were most sensitive to changes in utilities prior to relapse, BTZ costs and number of administrations. CONCLUSIONS: BC+R is an effective 1st line treatment for CLL patients when compared to FC or chlorambucil.

OBJECTIVES: To compare the costs of treating advanced or recurrent non-small cell lung cancer (NSCLC) with bortezomib plus vinorelbine and cisplatin (BC) versus cetuximab plus vinorelbine and cisplatin (CVC) in patients with advanced NSCLC versus chemotherapy alone. The Markov model was used to compare treatments associated with treating patients with advanced NSCLC with BC or CVC in Spain. METHODS: A Markov model was used to compare treatments associated with treating patients with advanced NSCLC with BC or CVC in Spain. RESULTS: The total costs were 42,145a and 60,564a for BC and 47,007 PLN and 53,826 PLN for CVC respectively. The model was run for up to 2 cycles, the final outcomes were based on changes in utilities and the cost of treatments. CONCLUSIONS: BC+R substantially improves patient outcomes and is an economically effective 1st line treatment for CLLS patients when compared to FC or chlorambucil.

OBJECTIVES: To evaluate the cost of treating advanced or recurrent non-small cell lung cancer (NSCLC) in Spain. METHODS: A Markov model was used to compare treatments associated with treating patients with advanced NSCLC with BC or CVC in Spain. RESULTS: The total costs were 42,145a and 60,564a for BC and 47,007 PLN and 53,826 PLN for CVC respectively. The model was run for up to 2 cycles, the final outcomes were based on changes in utilities and the cost of treatments. CONCLUSIONS: BC+R substantially improves patient outcomes and is an economically effective 1st line treatment for CLLS patients when compared to FC or chlorambucil.

OBJECTIVES: To evaluate the cost of treating advanced or recurrent non-small cell lung cancer (NSCLC) in Spain. METHODS: A Markov model was used to compare treatments associated with treating patients with advanced NSCLC with BC or CVC in Spain. RESULTS: The total costs were 42,145a and 60,564a for BC and 47,007 PLN and 53,826 PLN for CVC respectively. The model was run for up to 2 cycles, the final outcomes were based on changes in utilities and the cost of treatments. CONCLUSIONS: BC+R substantially improves patient outcomes and is an economically effective 1st line treatment for CLLS patients when compared to FC or chlorambucil.