of life cancer drugs, cetirizine may be considered as a cost-effective option compared with other available therapies for previous treated ALK + NSCLC.

PCN147 COST-EFFECTIVENESS OF BORTZOMIB FOR MULTIPLE MYELOMA: A SYSTEMATIC REVIEW

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OBJECTIVES: To summarize cost-effectiveness of bortezomib (BTZ) for multiple myeloma (MM) and identify bias in the published cost-effectiveness analysis (CEA). METHODS: Electronic bibliographic databases were searched from 2003 to 2014 using multiple CEA. The full publications of included CEA were reviewed for data extraction. The reported base case incremental cost-effectiveness ratio per gain quality adjusted life year (QALY) or life year (LY) were converted to the ratio to 2013 currency using the local economic product price index (GDPPI) to uniform cost-effectiveness according to World Health Organization (WHO) recommendation on cost-effectiveness threshold (3 GDPPC). The study designs and methods of the included CEA were assessed regarding their impact on cost-effectiveness. RESULTS: 3 CEA reported favourable cost-effectiveness of BTZ as induction treatment prior to stem cell transplantation (SCT) in Canada, Poland, and Germany (0.9397 to 2.351 GDPPC/QALY). BTZ/melphalan/prednisone (VMP) was cost-effective compared to MP for MM ineligible for SCT, and relapse/refractory MM when compared to conventional chemotherapy schemes (TC, FEC-D and AC-T). However, the survival outcomes estimated from indirect comparisons for VMP versus thalidomide (THD)/MP (MPT) and lenalidomide (LEN)/MP plus LEN as maintenance therapy was cost-effective compared to thalidomide in Nordic countries. However, the reported conflicting cost-effectiveness of BTZ relative to LEN/DEX when compared to best supportive care. The cost-effectiveness of BTZ for relapsed/refractory MM was favourable compared to thalidomide in USA (0.5235 GDPPC/LY) and dexamethasone (DEX) in Nordic countries. However, the reported conflicting cost-effectiveness of BTZ relative to LEN/DEX could also result from indirect comparisons on survival outcomes. CONCLUSIONS: BTZ was cost-effective for MM prior to SCT, MM relapse, and refractory MM when compared to conventional treatments. However, caution is needed when interpreting the cost-effectiveness of BTZ relative to MPT and MP-R for MM ineligible for SCT or LEN/DEX for relapse/treatments. However, caution is needed when interpreting the cost-effectiveness of BTZ relative to MPT and MP-R for MM ineligible for SCT or LEN/DEX for relapse/refractory MM due to the potential bias associated with indirect comparisons.

PCN148 CONSEQUENCES OF BIOMARKER ANALYSIS ON THE COST-EFFECTIVENESS OF CETYXIRIN IN COMBINATION WITH RITUXAN BASED CHEMOTHERAPY FOR FIRST-LINE TREATMENT OF METASTATIC COLON CANCER. STRATIFIED MEDICINE AT WORK?

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OBJECTIVES: An economic evaluation was conducted to investigate the Incremental Cost-Effectiveness Ratio (ICER) of cetuximab in combination with FOLFIRI versus FOLFOX, between three cohorts of the CRYSTAL study, and determine if the cost-effectiveness improves when treatment is stratified to patients with the genetic biomarkers, KRAS wild-type and RAS wild-type (wt) alone or in combination. METHODS: From the CRYSTAL study, Individual Patient Data (IPD) was obtained from Merck Serono Biostatistics department and transformed into the three health economic models: 1) To Treat (TTT); population and the two subgroups KRAS wild-type and RAS wild-type. Survival analysis was conducted on this data using R studio. Adverse events and resection rates were calculated using an IPD for the cohorts. Neutropenia prophylaxis and treatment strategies were used. A Merck Serono Cost Utility Model was then re-engineered to economically evaluate the three cohorts for comparison. RESULTS: From this analysis, the determination with FOLFIRI, ICER per Quality adjusted life year (QALY) gained for RAS wt and RAS wt is €20,445. The overall survival results are €130,929 in the TTT, €72,053 in the KRAS wt and €44,184 in the RAS wt cohorts. CONCLUSIONS: From these results, it can be concluded that based on the data from the CRYSTAL study, stratification of patients by genetic biomarker KRAS wt and RAS wt rather than the cost-effective regimen of cetuximab alone versus FOLFIRI alone. The RAS wt cohort had the lowest ICER and is therefore the most cost-effective of the three groups.

PCN149 COST-EFFECTIVENESS ANALYSIS OF GRANULOCYTE-COLONY-STIMULATING FACTORS FOR THE PROPHYLAXIS OF CHEMOTHERAPY-INDUCED FEBRILE NEUTROPENIA IN PATIENTS WITH BREAST CANCER IN GREECE

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OBJECTIVES: To evaluate the cost-effectiveness of primary and secondary prophylaxis (FP & SP) with pegfilgrastim, ligeplifrazin, and with 6-day filgrastim/lenograstim for chemotherapy-induced febrile neutropenia (FN) in patients with stage II-IV breast cancer treated with chemotherapy in Greece. METHODS: A Markov model containing a decision tree was locally adapted to estimate outcomes from payer perspective. The analysis was conducted for a lifetime horizon across three different chemotherapy schemes (TC, FEC-D and AC-T). Clinical inputs, such as baseline FN risk, efficacy of granulocyte colony-stimulating factors (G-CSFs), mortality, effect of FN on relative dose intensity were extracted from published studies. Direct medical costs (2015 IUG) for drug acquisition, administration and FN management were considered in this Markov model. The outcomes were calculated: 1) Incremental cost-effectiveness ratio (ICER) per FN event avoided. RESULTS: FP with pegfilgrastim was associated with fewest FN events (calculated by combining FN risk with the efficacy of G-CSF: 0.110, 0.100, 0.127 for TC, AC-T, FEC-D, respectively) followed by FP with ligeplifrazin (0.160, 0.146, 0.186 for TC, AC-T, FEC-D, respectively) and FP with filgrastim/lenograstim (0.340, 0.316, 0.410 for TC, AC-T, FEC-D, respectively). SP with pegfilgrastim was cost-effective versus SP with pegfilgrastim across all chemotherapy schemes (ICERs per FN event avoided: $7,472, $18,017 and $9,996 for TC, AC-T and FEC-D, respectively). SP with pegfilgrastim was cost-effective versus no prophylaxis. All other treatment strategies were excluded from the analysis via sensitivity analysis of incs +25% for pegfilgrastim. CONCLUSIONS: For instance, FP and SP with ligeplifrazin was found to be dominated by FP and SP with pegfilgrastim. These results held for patients with stage II and III BC. From the CRYSTAL study, Individual Patient Data (IPD) was obtained from Merck Serono Biostatistics department and transformed into the three health economic models: 1) To Treat (TTT); population and the two subgroups KRAS wild-type and RAS wild-type (wt) alone or in combination. SURVIVAL OUTCOMES: From these results, it can be concluded that based on the data from the CRYSTAL study, stratification of patients by genetic biomarker KRAS wt and RAS wt rather than the cost-effective regimen of cetuximab alone versus FOLFIRI alone. The RAS wt cohort had the lowest ICER and is therefore the most cost-effective of the three groups.