Surviving Preservation Time (RSFST) model were used as secondary analyses. The Inverse Probability of censoring Weights (IPCW) method and the Cox model using treatment as a time-dependent covariate were used as sensitivity analyses. RESULTS: Overall, 71% of patients randomized to dexamethasone crossed over to bortezomib. The primary analysis led to a hazard ratio of 0.59 (95% CI: [0.32, 0.86]) for bortezomib versus dexamethasone, compared to 0.77 (95% CI: [0.61, 0.97]) using the ITT approach. The results of the secondary analyses were consistent with the primary analysis. The IPCW provided results, which were very sensitive to the choice of the time interval. Lastly, the Cox model with treatment as a time-dependent variable resulted in a counter-intuitive higher hazard ratio than the ITT analysis, which is consistent with results from simulation studies indicating this approach is biased.

CONCLUSIONS: Adjusting for crossover led to a decrease of the hazard ratio from 0.77 to 0.59, and resulted in wider confidence intervals than the ITT analysis. Additional analyses are required to assess the performance of the IPCW method compared to the IPE algorithm and the RSFST model under different scenarios.

Cancer – Cost Studies

PCN24

BUDGET IMPACT MODEL FOR RARE CANCER TREATMENT: CASE IN POINT CUTANEOUS T-CELL LYMPHOMA

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OBJECTIVES: Develop budget impact model to forecast total cost of treatment for cutaneous T-cell lymphoma (CTCL) for US public and private payers. METHODS: The clinical trial data and life table were obtained from the published pivotal study and mortality results. Costs of adverse events were estimated based on claims database analysis, AHRQ’s HCUP and CMS Medicare 2009 databases. Drug cost was estimated based on 2011 AWP price. Epidemiology data were obtained from NCI-SEER and CDC databases. The budget impact model was implemented over a period of five years, based on a stable population and on different penetration and substitution rates of newly approved therapy. Model was developed in excel based format. Blinded Model design and outputs were tested with payers and KOLs. RESULTS: For rare caner such as CTCL, the budget impact of treatment with targeted cancer therapies is in the range of $460,000-$530,000 per 1 million covered lives. The per patient per month cost of the first year was $2,163 for imatinib and for nilotinib $2,603. The additional budget impact due to MEPACT is mainly due to the cost of the drug. From the tax calculations, we conclude that investment in MEPACT does not negatively impact the long run fiscal budget of the UK government. Conversely, by taking a broader government perspective over an average lifetime, a surviving patient returns a positive net value to the state.

PCN25

BUDGET IMPACT ANALYSIS FOR CHRONIC MIELOID LEUKEMIA THERAPY IN BULGARIA

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OBJECTIVES: To evaluate the budget impact of nilotinib for newly diagnosed patients with chronic myeloid leukemia (CML) for the health care system in Bulgaria. METHODS: Current standard of therapy (imatinib) is compared with the newly authorized bosutinib and dasatinib used as a first line therapy. Cost of yearly pharmacotherapy and adverse drug reactions management have been calculated for 3 years for different proportions of newly diagnosed patients with CML in chronic phase. The exchange rate is 1 BGN = 0.51 EUR. RESULTS: Clinical studies and expert judgment are the most important sources for the estimation of the cost of therapy. Calculation of the yearly pharmacotherapy cost per 100 patients arranges the medicines in monetary value order as follows: 5,398,092 BGN for imatinib, 6,564,681 BGN for nilotinib, and 8,365,872 BGN for dasatinib. Weighed cost by the probability of appearance of the ADR is 733.26 BGN for imatinib, 509.75 for nilotinib, and 1,010.29 BGN for dasatinib. The relative share of patients treated with nilotinib in first line is 12% for the first year, 32% for the second, and 38% for the third year. The introduction of nilotinib will change the budget for all patients with CML to 6,895,316 in comparison with 6,725,246 BGN before the introduction, to 7,177,671 BGN in the second year, and to 7,262,378 BGN in the third year. Thus the total over all increase for the observed 3 years will be within 179,044 BGN. CONCLUSIONS: The introduction of nilotinib as first line therapy for patients with newly diagnosed CML will lead to relatively small increase in the health care budget in Bulgaria compared to the clinical benefit in terms of achievement of deeper complete response, improvement of overall survival and less disease progression.

PCN28

CAPECTABINE FOR THE TREATMENT OF BREAST CANCER IN PRIVATE HEALTH SYSTEM IN BRAZIL: COST ANALYSIS BASED ON REAL WORLD DATA

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OBJECTIVES: Capecitabine (C) is approved in Brazil for the treatment of breast cancer in the private or public sector. In the private sector, it's not often used, due to the fact that health insurance plans (HI) do not offer coverage for oral (PO) chemotherapy (CHEMO), only for intravenous (IV). Our aim was to determine if the use of C could spare costs if adopted by HI. METHODS: We searched Evidencias Database for BC patients eligible for the use of C, in the year of 2008. This database has information from over 2 million of users of 14 HI. We identified the IV CHEMO use of C could spare costs if adopted by HI. Our aim was to determine if the use of C could spare costs if adopted by HI. RESULTS: We found 518 BC patients eligible for C use. Among the 185 patients that have information from over 2 million of users of 14 HI. We identified the IV CHEMO use of C could spare costs if adopted by HI. Our aim was to determine if the use of C could spare costs if adopted by HI. OBJECTIVES: Capecitabine (C) is approved in Brazil for the treatment of breast cancer in the private or public sector. In the private sector, it's not often used, due to the fact that health insurance plans (HI) do not offer coverage for oral (PO) chemotherapy (CHEMO), only for intravenous (IV). Our aim was to determine if the use of C could spare costs if adopted by HI. METHODS: We searched Evidencias Database for BC patients eligible for the use of C, in the year of 2008. This database has information from over 2 million of users of 14 HI. We identified the IV CHEMO use of C could spare costs if adopted by HI. Our aim was to determine if the use of C could spare costs if adopted by HI. RESULTS: We found 518 BC patients eligible for C use. Among the 185 patients that have information from over 2 million of users of 14 HI. We identified the IV CHEMO use of C could spare costs if adopted by HI. Our aim was to determine if the use of C could spare costs if adopted by HI. OBJECTIVES: The addition of MEPACT as an add-on treatment to adjuvant chemotherapy in the treatment of high-grade non-metastatic osteosarcoma after macroscopic complete surgical resection has been shown to significantly increase overall survival of young patients. This study assessed the costs (drug and administration) and the long-term financial impact on the UK (UK) government of introducing MEPACT. METHODS: Based on the cost of MEPACT and using survival rates derived from the clinical trial, we modelled the net budget impact of MEPACT compared to no MEPACT. Further, we modelled the net tax contribution to the state of a surviving patient over a lifetime by subtracting direct government transfers that are made to the individual (child benefit, etc.) from the individual’s gross income and taking into account the contribution of the country to the EU. RESULTS: Using UK incidence rates of osteosarcoma the model estimated approximately 54 newly diagnosed non-metastatic cases per year. Assuming that 38 doses of MEPACT (calculated from trial data) are added to the treatment regimen of 50% of patients at a cost of £191,689, the expected 1-year cost would be UK £3,972k compared with £1,450k had all patients been treated without MEPACT. Administration costs accounted for 3% of total costs. The lifetime discounted value of net taxes from a 1 year old patient treated with MEPACT is £79,000. The break-even age, defined as the point at which the net tax contribution becomes greater than zero, is approximately 41 years. CONCLUSIONS: The additional budget impact due to MEPACT is mainly due to the cost of the drug. From the tax calculations, we conclude that investment in MEPACT does not negatively impact the long run fiscal budget of the UK government. Conversely, by taking a broader government perspective over an average lifetime, a surviving patient returns a positive net value to the state.
CONCLUSIONS: Considering grades 1 and 2 NCCN recommendation for mRCC second-line targeted therapies, everolimus represents the highest quality of evidence and is also considered the lowest cost option for the management of associated AEs from public and private healthcare perspectives, in Brazil.

PCN32 COST SAVINGS WITH BEVACIZUMAB COMPARED TO SUNITINIB IN THE TREATMENT OF M RCC

Authors have assessed costs and outcomes of bevacizumab and sunitinib via systematic review, performed in January 2011. Survival rates, incidence of adverse events and overall costs were compared between the two treatments for mRCC in the Belgian and Croatian societies. Savings were calculated in kuna/patient year according to price listings of National Institute for Health Insurance. Local data was verified with structured interviews gathered with healthcare providers. The main findings were: bevacizumab demonstrated significantly lower adverse events costs than sunitinib. Overall budget impact (from payers perspective) when bevacizumab is introduced equals 29% (52.39 HRK (-4075 EUR) of savings per patient year). Increased head to head price comparison demonstrates that bevacizumab is less costly, demonstrating dominant ability to reduce costs due to less frequent and less costly adverse events, whereas in budget impact context introducing bevacizumab brings savings.

PCN33 COST ANALYSIS: TREATMENT OF CHEMOTHERAPY-INDUCED ANAEMIA WITH ERYTHROPOIESIS-STIMULATING AGENTS (ESAS) IN SPAIN

Data were derived from the IMS Hospital Disease Database, a longitudinal database in secondary care unique to Belgium. The objectives of this study were to assess the application of that analysis in the Spanish setting and to evaluate differences in cost between ESAs in Spain. Methods: To adapt the Belgian Hospital database to the Spanish population, it was possible to collect similar data from the Spanish population. These findings are consistent with those from the Belgian analysis.

CONCLUSIONS: By using published epidemiologic and treatment pattern data, it was possible to adapt the Belgian Hospital database to the Spanish population. Total and anaemia-related costs were lowest in patients receiving EPO compared with EPO or E. These findings are consistent with those from the Belgian analysis.

PCN34 COST ANALYSIS OF ANEMA TREATMENT WITH ERYTHROPOIESIS-STIMULATING AGENTS (ESAS) IN CANCER PATIENTS RECEIVING CHEMOTHERAPY IN ITALY

RESULTS: When compared to NCCN 2A recommendation grade for second-line targeted therapy, everolimus is cost-saving in base case and sensitivity analysis: versus sorafenib, there are savings ranging from 58.68BRL to 417.8BRL and from 96BRL to 5841BRL in public and private perspectives, respectively; versus sunitinib, savings vary from 153BRL to 681BRL and from 1778BRL to 5158BRL in public and private perspectives, respectively. Everolimus was cost-saving due to easily manageable AEs and their frequencies.

CONSIDERATIONS: Using grades 1 and 2 NCCN recommendation for mRCC second-line targeted therapies, everolimus represents the highest quality of evidence and is also considered the lowest cost option for the management of associated AEs from public and private healthcare perspectives, in Brazil.