Medicare beneficiaries aged ≥66 diagnosed with HM between January 1, 1995 and December 31, 2007. Incidence of acute myeloid leukemia (AML, n=10,173); colorectal carcinoma (CRC), Hodgkin lymphoma (HL, n=2,252), non-Hodgkin lymphoma (NHL, n=51,087); and multiple myeloma (MM, n=18,297). We used a discrete hazard model to estimate survival and 3-year costs using an internal model with a log-

PCN99 COST-EFFECTIVENESS EVALUATION OF SUNITINIB AS FIRST-LINE TARGETED THERAPY FOR METASTATIC RENAL CELL CARCINOMA IN KAZAKHSTAN

OBJECTIVES: Sunitinib is one of the first targeted treatments for metastatic renal cell carcinoma (MRCC) and is currently considered as the standard of care for most patients with relapsed disease. The present study aimed to estimate the cost-effectiveness of sunitinib versus bevacizumab in the first-line treatment of MRCC with a median overall survival of more than 2 years, improves quality of life and is becoming the first-line standard of care for MRCC. The introduction of targeted treatments, led to improvements in disease management and survival of the patients, however, with increased costs. Purpose this paper, to assess the economic value of sunitinib as first-line therapy in MRCC within the Kazakh health care system. METHODS: Cost-effectiveness of sunitinib has been assessed on several occasions and a systematic literature search was conducted to find all published research articles as well as all research abstracts presented in various congresses. An adapted Markov model with a 10-year time horizon was used to analyse the cost-effectiveness of sunitinib versus sorafenib (SOFN) and bevacizumab/bevacizumab (BEVINF) as first-line therapy from the Kazakh perspective. RESULTS: Progression-free survival and overall survival data from sunitinib, SFN and BEV-INF pivotal trials were extrapolated to project survival and costs in 6-week cycles. Results, in progression-free life-years (PFLY), life-years (LY) and quality-adjusted life-years (QALY) gained, expressed as incremental cost-effectiveness ratios (ICER) with costs and benefits discounted annually approximate 3%, were obtained using deterministic and probabilistic analyses. Survival was projected using a Markov model and life expectancy data from both SFN and BEV-INF with average cost savings/patients, respectively. Using a willingness-to-pay threshold, sunitinib achieved an incremental net benefit compared with SFN and BEV-INF, respectively. At a willingness-to-pay threshold, the probability of sunitinib providing the highest incremental net benefit was 72%. CONCLUSIONS: Our analysis suggests that sunitinib is a cost-effective alternative to other targeted therapies as first-line MRCC therapy in the Kazakh health care setting.

PCN100 COST-EFFECTIVENESS ANALYSIS OF ADDED RADIATION THERAPY TO ANDROGEN DEPRIVATION THERAPY TO IMPROVE OUTCOMES IN MEN WITH LOCALLY ADVANCED PROSTATE CANCER IN THE UNITED STATES

OBJECTIVES: Whether the addition of radiation therapy (RT) improves overall cost-effectiveness in men with locally advanced prostate cancer managed with androgen deprivation therapy (ADT) is still unclear. Our objective was to conduct cost-effectiveness analysis of adding radiation therapy to androgen deprivation therapies in men with locally advanced prostate cancer in the U.S. METHODS: A decision analysis model was designed to compare adding RT to ADT over a 10-year time horizon with the third party payer’s perspective. Probabilities of treatment success, utilization of salvage treatments, and rates of adverse events were taken from published results of SPCG-7/STUO-3 trial and NCIC CTG FR/3/MRC UK PR07 trial. Cost inputs were based on 2010 Medicare reimbursement rates and reported in 2013 US dollars. Primary outcome measure was incremental cost per biologi- cal success (i.e. serum PSA level <0.4 ng/ml), 50,000 U.S. dollars were considered willingness to pay threshold. A series of one-way sensitivity analyses and Monte Carlo simulations were performed to test the robustness of the model in the range of plausible cost and outcome vari- able independence. RESULTS: ART results in a higher biochemical success rate than hormonal therapy with a probability of 0.30 versus 0.21. The mean incremental cost was $25,783 compared with costs in the ADT group of $13,427 per year, the mean incremental cost for ART ver- sus ADT was $8,277 over 10 year period. The mean incremental cost effectiveness ratio was $17,958 per 10 year period. Cost-effectiveness acceptability curve analysis results, >90% probability that ART with hormonal therapy is cost-effective strategy. CONCLUSION: Study suggests that adding RT to ADT is cost effective strategy compared to ADT alone based on the decision analysis model for appropriate men with locally advanced prostate cancer. Study limitations and treatment dosage should be considered before applying the results of the study.

PCN101 THE EFFECT OF HERD IMMUNITY IN DIFFERENT HUMAN PAPILLOMAVIRUS VACCINATION STRATEGIES: AN ECONOMIC EVALUATION OF THE BEST II STUDY

OBJECTIVE: Italian recommendations for human papillomavirus (HPV) immuniza- tion currently consider females only. However, males can be vectors in viral transmission and at risk of disease. The BEST II study was designed to evaluate the cost-effectiveness (CE) of different interventions targeting females as well as males; and the economic impact of vaccination on a wide range of HPV-induced dis- eases. METHODS: A dynamic Markov Bayesian Markov model was developed to investigate the transmission between sexual partners and the cost-effectiveness of vaccination targeting female and male cohorts in comparison to screening and female cohorts only. A range of HPV-induced diseases was considered (cervical, vaginal, vulvar, and anal). RESULTS: Our findings suggest that over a period of more than a decade, improvements in treat- ment and have been associated with increases in survival, but also with substantial increases in health care costs. Overall, HPV therapy interventions appear to provide good value for money among Medicare patients when evaluated using conventional cost-effectiveness metrics.

PCN102 COST-EFFECTIVENESS ANALYSIS OF BENDAMUSTINE-RITUXIMAB TREATMENT COMPARED WITH FLUDARABINE-RITUXIMAB TREATMENT, IN PATIENTS WITH INDOLENT NON-HODGKIN'S LYMPHOMA IN COSTA RICA

OBJECTIVES: To assess the cost-effectiveness of Bendamustine-Rituximab (BR) compared with Fludarabine-Rituximab (FR) treatment, in patients with Indolent Non-Hodgkin's Lymphomas (INHL) that have progressed during or within six months of treatment with Rituximab or a Rituximab-containing Regimen in Costa Rica. METHODS: A three-health state cohort simulation Markov Model (progression- free, progressive disease, and death) was developed based on time-dependent progression and survival data. The time horizon was 15 years (from diagnosis to death) and the life expectancy was 77 years. The perspective was that of the National Health System of Costa Rica. The health outcomes of interest were Quality Adjusted Life Years (QALYs), Life Years (LYs) and Progression-free Life Years (PFLYs). Resource consumption for health states was elicited with the support of Latin American hematologists. Utilities for health states and disutility for adverse reactions were taken from published studies. All costs and Incremental Cost Effectiveness Ratios (ICERs) are presented in Costa Rican colon. CONCLUSIONS: Compared to BR, there was no difference in QALYs, LYs and PFLYs. The cost difference was 105,018₡ for BR treatment compared to FR treatment.

PCN103 REALISATION OF COST-EFFECTIVENESS OF ABRIRATONE ACETATE AS SECOND LINE TREATMENT FOR METASTATIC PROSTATE CANCER IN JAPAN USING A JAPANESE CLAIMS DATABASE

OBJECTIVES: The objective of this study is to evaluate cost-effectiveness of abirater- one plus prednisolone compared to prednisolone alone in Japan. We presented the result of cost-effectiveness analysis of abiraterone acetate in the randomized controlled trial (RCT) conducted at the 2007 ESMO Congress. In the present study we reanalyze the cost-effectiveness of abiraterone by referencing the real world resources using a Japanese claim data set. METHODS: Cost-effectiveness analysis was performed using a Markov model based on data from the randomized controlled trial conducted at the 2007 ESMO Congress. An observational study conducted from the public health care payer's perspective. The abiraterone plus prednisolone was compared with prednisolone alone. The base case was assumed to be a 72-year-old man with metastatic castration-resistant prostate cancer (CRPC). The model used a time horizon of 10 years. Outcomes were measured in quality-