cTACE strategy was estimated to be 414 days whereas that of DEB TACE strategy was estimated below the market average. At current private market prices of Cost-Eff (2015) A1–A307

CONCLUSIONS: These results demonstrate that new drugs co-administered with anchor branded therapies require substantial OS gains to support cost-effective pricing, as these drugs are dosed to progression. This analysis highlights the utility of early economic models in evaluating potential pricing and HTA barriers early in the development process.

PCN98 COST-EFFECTIVENESS OF CO-ADMINISTERED BRANDED THERAPIES IN ONCOLOGY: INSIGHTS FROM AN EARLY ECONOMIC MODEL

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OBJECTIVES: The purpose of this study was to evaluate the maximum cost-effective price (CEP) supported for innovative drugs co-administered with existing branded therapies. METHODS: An early economic model was constructed in Microsoft Excel and used to calculate CEPs assuming an exponential distribution; different median PFS and OS gains were assumed to determine the maximum cost-effective price permitted for the add-on therapy. The maximum supported price was evaluated at two different willingness-to-pay (WTP) thresholds of £20,000/QALY and £50,000/QALY. When administering with a low-cost anchor, the add-on would be cost-effective at a WTP of £50,000/QALY with a price up to £583/month; with an anchor with a high-cost therapy, no CEP was supported. In order to support any CEP for the add-on, substantial gains in OS are required for: a WTP gain of £1 billion (US; CLL diagnosis 2002 to 2010), a gain of 6.9 months for OS would be required at a WTP of £50,000/QALY CONCLUSIONS: These results demonstrate that new drugs co-administered with anchor branded therapies require substantial OS gains to support cost-effective pricing, as these drugs are dosed to progression. This analysis highlights the utility of early economic models in evaluating potential pricing and HTA barriers early in the development process.

PCN100 A NEW APPROACH FOR IDENTIFICATION OF DISEASE-RELATED MEDICAL BILLING CODES FOR CHRONIC LYMPHOCYTIC LEUKEMIA FOR USE IN COST ANALYSES IN ADMINISTRATIVE CLAIMS DATA

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OBJECTIVES: To evaluate a new empirical algorithm for selecting disease-related medical billing codes associated with chronic lymphocytic leukemia (CLL). METHODS: Patients in the SEER-Medicare database with a CLL diagnosis (0000 to 2010) who were randomly matched to a non-cancer sample. A proprietary coding algorithm based on code frequency (sensitivity, specificity precision or accuracy) and cost was used to identify procedure (i.e., CPT and HCPCS) and diagnosis (ICD-9-CM) codes that differed between the CLL and non-cancer groups. Summarized costs for claims with the empirically identified codes were compared to a traditional approach of identifying disease-related claims based on presence of a CLL diagnosis in the first diagnosis field. The code set was applied to a sample from a prior CLL study conducted with commercial claims to assess generalizability. RESULTS: The analysis evaluated 10,351 unique billing codes with total costs of $1 billion (US; CLL diagnosis 58.3%; non-cancer 41.7%) for 7,050 age and gender matched SEER-Medicare subjects per group. The empirical algorithm found 333 codes that identified 25.0% of the CLL group costs as cancer-related. The traditional approach used claims that contained 2,001 codes and identified a much lower 14.6%. Approximately 1% of costs were potentially misidentified in the non-cancer cohort, providing further confirmation of the codes selected by the empirical method. Qualitative review of codes revealed stronger content validity with the empirical approach compared to the traditional approach. Application of codes identified in the SEER-Medicare data to the cancer cohorts was associated with a 1% error rate. CONCLUSIONS: The traditional approach underestimates costs and captures costs from procedure codes that do not appear to be cancer-related. Use of an empirical approach to identify disease-related diagnosis and procedure codes will increase content validity.


PCN7 CASE STUDIES OF COST-EFFECTIVENESS FOR CO-ADMINISTERED BRANDED THERAPIES IN ONCOLOGY FROM THE PERSPECTIVE OF THE ECONOMIC MODEL

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OBJECTIVES: The purpose of this study was to develop an early economic model to compare the maximum supported cost-effective prices (CEP) of recently launched co-administered branded drugs to their list prices in the UK. METHODS: An early economic model was constructed in Microsoft Excel using a three-state Markov model with progression to the target state; transition between the states was based on cost-effectiveness ratios (ICER) for cTACE versus DEB TACE operation costs have the greatest effect on the results. CONCLUSIONS: Results from this study suggest that employing a cTACE strategy is cost-effective intervention compared to DEB TACE in patients with hepatocellular carcinoma as it shifts the willingness-to-pay threshold determined by world health organization (3xGDP/cap) for low and middle income countries.

PCN95 COST-EFFICACY ANALYSIS OF IPILIMUMAB IN PERU

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OBJECTIVES: Pricing and reimbursement is typically approached product by product, not in comparison across therapeutic areas in Peru. Within oncology, there are relatively few treatment options for advance stage cancer patients that have documented activity in Peru; yet, the list price of ipilimumab has been recently approved in Peru for the treatment of unresectable or metastatic melanoma. Given the rising costs of cancer care payers and physicians need to better understand the value of innovative oncology drugs for reimbursement decision making. This study assesses the cost per additional month of mean overall survival of ipilimumab and how this metric compares to other oncology agents approved in Peru in the metastatic setting. METHODS: We selected agents that received regulatory authorization for patients with metastatic melanoma in Peru and had primary or secondary objective. Mean OS was obtained from published literature. Drug prices were obtained from “observatorio de precios de DIGEMID” a public database. The economic value of each agent is presented in terms of cost per additional month of mean OS from a private healthcare payer perspective. The analysis uses the cost to treat to mean progression of each agent divided by the months of mean overall survival of the agent, using its current list price and overall survival in years to assumed an exponential distribution; different median PFS and OS gains were assumed to determine the maximum cost-effective price permitted for the add-on therapy. The maximum supported price was evaluated at two different willingness-to-pay (WTP) thresholds: £20,000/QALY and £50,000/QALY. All costs and outcomes were discounted at 4.5%. RESULTS: The results from the early economic model suggested that neither pertuzumab nor trastuzumab would ever be a cost-effective therapy even at a WTP threshold of £50,000/QALY. Idelalisib was projected to have a cost-effective price, which was similar to the current list price in the UK. CONCLUSIONS: These results demonstrate that neither pertuzumab nor trastuzumab have CEPs, while the CEP for idelalisib is similar to the UK launch price; these findings can be used to guide payers co-administered without anchors dosed to progression (here, rituximab) will permit higher prices while remaining cost-effective. This analysis highlights the utility of early economic models in assessing potential pricing and HTA barriers early in the development process.