within cost-effectiveness constraints. An annual PAP program would provide the most additional QAL Ys and training costs) when cost per dose falls below $27.20 threshold. After HPV vaccination is adopted, should we still have decreased treatment costs exceed increased screening, program and training costs) when cost per dose falls below the cost-effectiveness ratio below $50,000 per QAL Y gained in advanced NSCLC patients with preferred clinical characteristics in which a significant extension of overall survival has been demonstrated.

PCN35

COST-EFFECTIVENESS ANALYSIS OF DASATINIB FOR THE TREATMENT OF IMATINIB RESISTANT OR INTOLERANT CML PATIENTS IN BRAZIL
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OBJECTIVE: Currently imatinib resistant or intolerant CML patients have minimally effective therapies available. Dasatinib binds to the protein Bcr-Abl; it binds also to active and inactive forms of protein, while imatinib binds only to the inactive forms. Therefore, mutations that affect the active form can lead to resistance to imatinib. A Markov model was built to evaluate the long-term cost-effectiveness of dasatinib in the treatment of adult CML patients, after resistance or intolerance to imatinib.

METHODS: The model consists of an initial within-trial period in which best response rates observed from the clinical trials are used. Response was defined as best response of complete hematologic response (CHR), minor cytogenetic response (CyR), minimal CyR, partial CyR, and complete CyR. The model simulates patients moving between health states using progression probabilities derived from the literature and BMS clinical trials. The time horizon was the lifetime of patients in the cohort, allowing evaluation of life expectancy and lifetime costs. Brazilian costs and health resource estimates were applied to the treatment of the different phases of CML.

RESULTS: For CML patients in CP dasatinib provided 0.66 QAL Ys per patient and the ICER was R$80,000 with an additional life expectancy of 0.98 years. In the case of AP dasatinib provided an additional life expectancy of 3.48 years with a ICER of R$91,000. And in the BP dasatinib provided an additional life expectancy of 1.91 years with an ICER of R$123,000.

CONCLUSION: The CE analysis showed that dasatinib is more cost-effective in the resistant or intolerant patients than imatinib in the three phases of CML with increased life expectancy with quality. Though there is an incremental cost associated to the treatment with dasatinib, the cost is related to longer life expectancy and therefore expenditure of more resources.

PCN36

COST-MINIMIZATION ANALYSIS OF CAPECITABINE FOR ADVANCED GASTRIC CANCER IN TAIWAN
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OBJECTIVE: Gastric cancer is the fifth most prevalent cancer and the fifth cause of cancer-related mortality in Taiwan. The objective of this study was to access the cost-effectiveness of capecitabine plus cisplatin (XP) vs. intravenous 5-fluorouracil plus cisplatin (FP) for the treatment of advanced and metastatic gastric cancer (AGC) in Taiwan, from a payer’s (Bureau of National Health Insurance [BNHI]) perspective.

METHODS: A cost-minimization analysis (CMA) was conducted by applying
clinical outcomes and medical resource utilization (MRU) derived from the phase III ML17032 study. Direct medical costs associated with trial-based MRU were based on Taiwan’s National Health Insurance fee schedule for 2007. Costs associated with intravenous chemotherapy administration and adverse event (AE) management were estimated by an expert panel survey conducted among 12 oncologists. One-way sensitivity analyses were performed on key model parameters by varying the input values by ±20%. RESULTS: A trend toward superior progression-free survival was observed in the XP arm (median 5.6 months for XP vs. 5.0 for FP). Patients in the XP arm received 5.2 cycles of therapy vs. 4.6 cycles of FP. Compared to FP, administration of XP required fewer consults per patient (5.2 for XP vs. 22.8 for FP). Chemotherapy drug cost was higher (USD $1712) in the XP arm; however, these cost increments were offset by differences of chemotherapy administration costs (USD $4376) between two arms. AE profiles were similar and the cost associated with grade 3/4 AE management were slightly lower (USD $30) in the XP arm. Overall, XP was associated with a cost saving of USD $2691 (NTD$87,351). XP remained cost-saving under one-way sensitivity analyses. CONCLUSION: From the Taiwan BNHI perspective, this CMA demonstrates that replacing FP by XP for the treatment of AGC would not only save direct medical costs but also improve health outcomes in Taiwan.

PRELIMINARY COST-CONSEQUENCE ANALYSIS OF EPIRUBICIN/CISPLATIN/SFU (ECF) COMPARED TO EPIRUBICIN/CISPLATIN/CAPECITABINE (ECX) IN PATIENTS WITH ADVANCED OESOPHAGEAL CANCER

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OBJECTIVE: To undertake a cost-consequence analysis of direct medical costs in the treatment of advanced oesophageal cancer based on the REAL 2 randomized clinical trial, which demonstrated non-inferiority when oral capcitabine was substituted for infusional SFU as part of the standard regimen. ECF. METHODS: Direct medical costs (2007 CDN$) from the perspective of the Canadian public health system were applied to resources (e.g., study treatment, toxicity management) obtained from REAL 2 trial data available in the public domain. Complete drug delivery was assumed. Mean overall costs per patient were estimated over six cycles, corresponding to treatment duration. RESULTS: The mean total cost per patient treated with ECF was $9065 and $9268 for ECX. The major driver of cost in the ECX arm is chemotherapy drug, $5472 for capcitabine versus $2400 for infusional SFU (6 cycles). This is offset by the cost of chemotherapy administration, $1551 for ECF compared to $671 for ECX, and central venous access costs, $1230 for ECF. Additional line complication and hospitalization data were not available and therefore not included in these estimates. Limited data on toxicity management, (e.g. febrile neutropenia, anemia, thromboembolism), are available, and cost estimates are $2955 for ECF and $2433 for ECX-treated patients. CONCLUSION: ECX has similar efficacy to ECF in the REAL 2 trial, but has potential advantages in terms of patient preference and convenience of an oral therapy. In addition, oral therapy decreases hospital resource consumption. While drug costs for ECF are greater, costs for chemotherapy administration and line-related costs are substantially less, and underestimated in this analysis. Substituting capcitabine for infusional SFU in the ECF regimen is an attractive and affordable alternative for patients with advanced oesophageal cancer.