

injection cost of \$23.10, and office visit cost of \$42.45. **RESULTS:** The annual average drug costs per patient were \$4,590 (DA) and \$5,244 (EA). Average drug costs for administrations were \$92 (DA) and \$277 (EA). Per member per year (PMPY) costs were \$4,682 (DA) and \$5,521 (EA). The annual total costs per population (n=1,755) were \$8,217,612 (DA) and \$9,688,952 (EA). **CONCLUSIONS:** DA Q3W has the potential to provide cost savings over EA QW in terms of annual average drug cost per patient (\$654 savings), per member per year (\$839 savings), and total cost per population (\$1,471,340 savings). DA Q3W may offer a cost advantage over EA QW as it allows for synchronizing of anemia management with ongoing cancer treatments, which may reduce required patient visits and blood tests.

## PCN25

#### BUDGET IMPACT ANALYSIS (BIA) OF CABAZITAXEL INTRODUCTION IN TREATMENT OF METASTATIC HORMONE-REFRACTORY PROSTATE CANCER (mHRPC) IN RUSSIAN FEDERATION

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**OBJECTIVES:** The purpose of this study was to evaluate financial impact on Russian National Healthcare Service (RNHS) budget of the introduction of Cabazitaxel in second-line treatment of patients with mHRPC previously treated with a Docetaxel-containing regimen in first-line. **METHODS:** The numbers of mHRPC patients eligible for first-line and second-line treatment were estimated based on local demographic figures, incidence data and experts opinion. A BIA model combined the data of official algorithms (standard of treatment approved by Ministry of Health of Russian Federation) and guidelines of mPC management, as well as local expert opinion and published data on resource use and unit costs from published sources. The BIA model stimulates the impact of mHRPC second-line management with or without Cabazitaxel. Resources to manage first-line and second-line treatment included standard chemotherapy, premedication, G-CSF prophylaxis, concomitant medications, management of adverse events, visits and diagnostics. **RESULTS:** It was estimated that in the first three years following Cabazitaxel introduction in second-line mHRPC patients treatment regimen, just 104, 259 and 311 out of 1036 eligible patients with mHRPC previously treated with a Docetaxel-containing regimen in first-line would be placed on Cabazitaxel therapy respectively. It would imply moderate incremental cost of 121.8, 304.6 and 365.5 mln RUB for second-line treatment of mHRPC respectively. From the other hand cost for first-line treatment would significantly decline due generic erosion of Docetaxel, resulting in following cost savings 248.8, 289.0 and 325.2 mln RUB, respectively. As the result the total incremental budget increase will be 15.6 and 40.3 mln RUB on second and third years of Cabazitaxel introduction, respectively. **CONCLUSIONS:** Because of small size of estimated candidate population the incremental financial budget impact on RNHS following the introduction of Cabazitaxel would be very small and offset by savings from first-line treatment due to generic erosion of Docetaxel price.

## PCN26

#### ESTIMATING THE POTENTIAL BUDGET IMPACT OF ZELBORAF (VEMURAFENIB) FOR ADVANCED MELANOMA TREATMENT IN BRAZILIAN PRIVATE HEALTH CARE SYSTEM

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**OBJECTIVES:** Melanoma accounts for less than 5% of skin cancers, but is responsible for 90% of skin cancer-related deaths worldwide. According to Brazilian Institute of Cancer 2012 statistics, it was estimated 6,230 cases of melanoma. BRAF mutations occur in approximately 50% of cases, being associated with poorer patient prognosis in advanced melanoma. Historically, there have been limited treatment options for advanced melanoma, resulting in a critical unmet clinical need for more effective therapies. Vemurafenib is a novel targeted therapy, effective for BRAF-V600 mutation-positive unresectable or metastatic melanoma treatment, orally administered and available in Brazilian market since 2012. Therefore, the aim of this study was estimate the economic impact of vemurafenib reimbursement in Brazilian Private Healthcare System Budget. **METHODS:** Based on an epidemiologic approach, the potential number of patients for vemurafenib was estimated. Only the private market was considered, accounting for 40% of all patients and only drug costs were evaluated. The ex-factory price and labeled dose of 960mg b.i.d. were used. Average therapy duration of 6 months was assumed. Costs were reported in Brazilian Reals (BRL1.00-US\$0.48 Dec. 2012). A total health assistance budget of BRL67.9 billion was considered, according to Brazilian National Agency for Supplementary Health data from 2012. **RESULTS:** A total of 756 cases of advanced melanoma are expected in 2013 in the private system, corresponding potentially to 378 patients harboring BRAF-V600E mutation. Treating all potential patients with vemurafenib would yield a total drug cost of BRL59.101.395, corresponding to a potential budget impact of 0.087%, considering health assistance budget. Cost savings owing to oral administration was not considered. **CONCLUSIONS:** By identifying the patients with BRAF-V600E mutation, therapy can be targeted to those who present a higher chance to respond to treatment, resulting in a potential low impact of vemurafenib in private health care system budget, mainly because of its very selected and specific eligible population.

## PCN27

#### PHARMACOECONOMIC ANALYSIS OF DOCETAXEL IN THE ADJUVANT THERAPY OF BREAST CANCER

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**OBJECTIVES:** To identify the dominant scheme of adjuvant breast cancer therapy (comparing the two chemotherapy regimens - 6FAN (6 cycles: 5-Fluorouracil + Doxorubicin + Cyclophosphamide) vs 6DAC (6 cycles: Docetaxel + Doxorubicin + Cyclophosphamide)). **METHODS:** Based on the Markov model, the cost of treatment for breast cancer was evaluated; an  $\hat{a} \hat{o} \hat{i} \hat{e} \hat{a} \hat{g} \hat{a} \hat{i} \hat{y}$  analysis of direct and indirect costs was conducted. Direct costs included cost of adjuvant chemotherapy (6FAC and 6DAC), medical services, adjuvant endocrine therapy, cardiac monitoring, current therapy cost and cost of treatment complications. Indirect costs included cost of patient's disability, maintenance of orphans, GDP losses caused by mortality and disability and sick-pay. **RESULTS:** Based on a clinical study BCIRG 001 (Martin M, Mackey J, Pienkowski T) and as an outcome of Markov simulation it was determined that the use of 6DAC for adjuvant therapy in 10 year horizon of research allows to increase the disease-free survival by 6.09%, and overall survival by 5.88% comparing to 6FAC. Use of 6DAC instead of 6FAC allows to reduce the number of patients with local relapse, regional relapse and metastasis insignificantly as well. In the result of direct costs analysis it was determined that for 10-years horizon cost rate for the treatment of one patient with breast cancer will be \$66,026 for 6DAC and \$60,845 for 6FAC. Direct and indirect costs rate of the breast cancer treatment were \$84,818 and \$85,991 for the 6DAC and 6FAC schemes respectively. **CONCLUSIONS:** It was determined that the scheme of adjuvant therapy that includes Docetaxel besides of addition efficiency, allows to reduce the cost rate to \$1173 in 10 years.

## PCN28

#### BUDGET IMPACT OF CRIZOTINIB FOR ALK-POSITIVE ADVANCED NON-SMALL CELL LUNG CANCER (NSCLC) IN COLOMBIA

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**OBJECTIVES:** Lung cancer (LC) is one of the major health problems due its high mortality. The most common type of LC is non-small cell lung cancer (NSCLC), which accounts for approximately 80% of all LC cases; approximately 3%-5% of these have a gene defect called ALK (anaplastic lymphoma kinase). The aim of this study was to evaluate the budgetary impact of adding crizotinib for patients with ALK-positive advanced NSCLC in Colombia. **METHODS:** A budget-impact model was developed to evaluate crizotinib from the payer perspective. Comparators were: crizotinib (250mg bid), erlotinib (150mg/day), bevacizumab/platinum doublet (15mg/kg/Carboplatin AUC6+Paclitaxel 200mg/m<sup>2</sup> per cycle [28 days]), paclitaxel/platinum (Carboplatin AUC6+Paclitaxel 200mg/m<sup>2</sup> per cycle), docetaxel/platinum (Cisplatin 75mg/m<sup>2</sup> + Docetaxel 75mg/m<sup>2</sup> per cycle), pemetrexed/platinum (Carboplatin AUC6+Pemetrexed 500mg/m<sup>2</sup> per cycle), gemcitabine/platinum (Cisplatin 75mg/m<sup>2</sup> day1+Gemcitabine 2,500mg/m<sup>2</sup> per cycle). Two scenarios were compared: (1) no tested patients, excluding crizotinib (2) all patients tested with FISH (diagnostic test) to identify ALK-positive NSCLC patients; it was taken into account a positive match for ALK of 4.2% and only 3% receiving crizotinib. Epidemiology and acquisition, administration and adverse events costs were estimated from Colombian sources, values are expressed in 2012 US\$. **RESULTS:** Considering Colombian population >18 years (incident rate of LC 0.018%, proportion NSCLC 87.86% and advanced NSCLC 52.29%), it was estimated a cohort of 4768 advanced NSCLC patients, overall 1-year costs of treating patients with NSCLC would be US\$197,929,584 with crizotinib, compared with US\$190,725,844 without crizotinib. Acquisition costs of crizotinib were offset by reductions in adverse events (AE) costs (anemia, anorexia, asthenia, diarrhea, dyspnea, fatigue, neutropenia, neutropenic infection, nausea, vomiting, pulmonary events.). Administration costs accounted between 37.77%-38.16% of total costs, while AE management costs made up 1.19% to 1.27% of total costs. **CONCLUSIONS:** Treating ALK-positive advanced NSCLC patients with crizotinib, leads to a decrease in total costs of managing adverse events (US\$65,042) and progression costs.

## PCN29

#### BUDGET IMPACT MODEL FOR 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 U.S. public and private payer. **METHODS:** The clinical efficacy and safety data were obtained from the published pivotal study 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 was obtained from NCI-SEER and CDC databases. A 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 cancers 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 member (PPPM) budget impact of this treatment is 46-53 cents. U.S. payers rated PPPM output as the one of the most important relevant outputs of model. **CONCLUSIONS:** This budget impact model shows that new treatments for rare forms of cancer are likely to have minimal budget impact on payers. PPPM based outputs are more relevant to payers, than per patient treatment costs. However, an emerging concern is the total budget