

the treatment of ALK+NSCLC's patients with crizotinib were associated with low budget impact to the Brazilian private health system.

## PCN60

## LAWSUITS TO RECEIVE FREE DRUGS: FEDERAL EXPENDITURES FOR THE BRAZILIAN PUBLIC HEALTH SYSTEM (SUS)

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**OBJECTIVES:** Due to the increasing demand for Lawsuits to receive free medication in Brazil, it is estimated that the increase in costs may compromise the sustainability of SUS. The aim of this work is to analyze Federal expenditures for the Brazilian Public Health System (SUS) with drugs obtained through lawsuits between the years 2011-2014. **METHODS:** Cross-sectional study, with descriptive and analytical characteristics. Data collected from the DW / COMPRASNET platform. **RESULTS:** In total 12,578 lawsuits were identified at the federal level and 15 drugs with the highest acquisition value were extracted. Of these, seven drugs corresponded to US\$ 452.644.065.68 million dollars of the federal budget, which represented 87% of the total expenditure of the actions studied, most of them were oncologic and rare diseases drugs. Of the 15 drugs / year studied, 14.28% (n = 4) were registered at the National Brazilian Surveillance Agency (ANVISA), were incorporated by the National Commission for the Incorporation of Technologies in SUS (CONITEC) and were part of the List of essential drugs (RENAME); 46.42% (n = 13) were registered with ANVISA, but not incorporated by CONITEC and not members of RENAME; 3.57% (n = 1) registered in ANVISA, incorporated by CONITEC and non-RENAME members and 35.71% (n = 10) without ANVISA registration, not incorporated by CONITEC and not RENAME members. **CONCLUSIONS:** With the Lawsuits to receive free medication, the acquisitions are carried out without planning or establishing minimum criteria such as: the presence of registration at ANVISA, incorporation in SUS and presence in RENAME, may compromise SUS sustainability. It is urgent that the Judiciary approaches the Executive stakeholders to initiate a responsible commitment to the health rights of the Brazilian population.

## PCN61

## LAPATINIB WITH LETROZOLE AS A TREATMENT STRATEGY FOR PATIENTS WITH METASTATIC BREAST CANCER (HER2+) UNDER THE PERSPECTIVE OF BRAZILIAN PUBLIC HEALTHCARE SYSTEM: A BUDGET IMPACT ANALYSIS

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**OBJECTIVES:** The goal of this study was to estimate the budget impact of lapatinib with letrozole as a therapy for metastatic breast cancer with HER2+ status into Brazilian Public healthcare system (SUS). **METHODS:** Epidemiological data were from Ferlay, et al., 2013. Drugs costs were from Health Price Bank (BPS) of Brazilian Ministry of Health (MOH), a public purchasing database. The analysis looked into 5 years under the perspective of MOH. Only drug costs were considered for analysis. We have also performed sensibility analyses, in parameters of prices (ex-factory, Maximum price for MOH, and negotiated prices) and taxes from different states perspectives. **RESULTS:** The budget impact was estimated to a population of 86,789, considering 50% limitation (43,395 and 38,293) of women for the 5th year, with ages from 50-64 years old, diagnosed with breast cancer HER2+. The budget impact analysis under the reference case (market share of 100% of letrozol), in five years, would represent US\$18 MI, allowing for an annual growth rate of the total number of patients. The adoption of the newer strategy, for the lapatinib and letrozol (3 alternative scenarios lapatinib + letrozol, scenario 1 (25% of market share), scenario 2 (45%) and scenario 3 (65%)), adjusted for the inflation, represent a budget impact of approximately, US\$ 941 milhões. This increase of 307% would occur in the 5 years perspective. **CONCLUSIONS:** Under the perspective of Brazilian SUS the incorporation of lapatinib and letrozol is not recommended due to high budget impact to SUS. Further, cost effectiveness and budget impact studies can give stronger evidence to decision making.

## PCN62

## BUDGET IMPACT OF INCREASED UTILIZATION OF PALONOSETRON FOR THE CONTROL OF CHEMOTHERAPY INDUCED NAUSEA AND VOMITING IN MANAGED CARE

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**OBJECTIVES:** Currently, several branded and generic serotonin-3 receptor antagonists (5HT3RAs) are indicated for chemotherapy induced nausea and vomiting (CINV). While these medications differ in efficacy and acquisition cost, palonosetron is a second generation 5HT3RA commonly recommended by treatment guidelines (e.g., NCCN, MASCC, ASCO). Using a decision analytic model, this study examined the financial impact of a 5% increase in the utilization of palonosetron vs. a generic 5HT3RA (ondansetron) in cancer treated with a highly (HEC) or moderately emetogenic chemotherapy (MEC). The results illustrate the costs to manage CINV from a payer perspective. **METHODS:** The model generated outputs for a hypothetical one-million member healthplan. The eligible population was determined from national rates of cancer and chemotherapy. Antiemetic-specific rates of CINV were based on retrospective analyses defining CINV by ICD9 codes or use of rescue antiemetics. Other inputs included current 5HT3RA market share, medication acquisition costs, and per-patient costs to treat

CINV. Model outputs predicted pharmacy and medical costs in the base year and following the 5% utilization increase. **RESULTS:** The model predicted a population of 968 patients, 282 (14.1%) treated with HEC and 686 (34.3%) with MEC. Increasing the utilization of palonosetron by 5% (59% to 64% in HEC, 51% to 56% in MEC) resulted in an increase in pharmacy acquisition costs from \$1.00 million to \$1.02 million. CINV treatment costs, however, would decrease from \$2.41 to \$2.35 million. Overall, net costs for the MCO decreased by \$73.4K, or \$0.01 PMPM. **CONCLUSIONS:** As expected, this model predicted an increase in pharmacy costs from the increased utilization of palonosetron relative to generic ondansetron. However, because the rate of CINV control associated with palonosetron was lower than with ondansetron, CINV treatment costs decreased. Increasing the utilization of palonosetron in MEC and HEC, then, may result in an overall net savings to a health plan.

## PCN63

## BUDGET IMPACT ANALYSIS OF RITUXIMAB IV VERSUS SC FROM PUBLIC BRAZILIAN HOSPITAL

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**OBJECTIVES:** The analysis aimed to compare the total cost of rituximab IV versus SC in both indications approved by ANVISA[i] for rituximab SC: follicular lymphoma (FL) first line and maintenance and diffuse large B-cell lymphoma (DLBCL) first line. **METHODS:** Budget impact analysis was conducted based on the direct cost of Hospital Geral de Curitiba (HGEC), active healthcare professional (HCP) time from a time and motion study,[ii]wage paid from Paraná, and the treatment cost of rituximab. In order to quantify the cost per professional involved in the administration and manipulation of the drugs, the wage paid and active HCP time were used to monetize labor. As HGEC has only pharmacists and nurses involved in the procedure, the time and motion study was adapted to HGEC scenario. The total cost of rituximab was calculated according to drug information leaflets, assuming 20 and 8 cycles for FL and DLBCL, respectively. The results were expressed as cost difference per patient between rituximab IV and SC and were calculated according to the puncture: peripheral or catheter. **RESULTS:** The saving generated by switching IV to SC was R\$ 12.091,66 and R\$ 12.960,91 per patient (peripheral and catheter, respectively) for FL, whereas for DLBCL the saving generated was R\$ 4.454,82 and R\$ 4.775,07 per patient (peripheral and catheter, respectively). **CONCLUSIONS:** Use of rituximab SC is less costly compared to rituximab IV, and switching IV to SC can bring resource savings to HGEC. Other institutions can also use this analysis as a model and quantify their savings from switching IV to SC. [i] Produtos Roche Químicos e Farmacêuticos S.A. MabThera IV e MabThera SC (rituximabe) [Bula]. 2016. p. 1-65. [ii] Cock, E., D., et al., Time Savings with Rituximab Subcutaneous Injection versus Rituximab Intravenous Infusion: A Time and Motion Study in Eight Countries.PLOS ONE. 2016; 11(6):e0157957. doi: 10.1371/journal.pone.0157957.

## PCN64

## COST-EFFECTIVENESS AND BUDGET IMPACT ANALYSIS OF IMATINIB AS FIRST-LINE TREATMENT OF CHRONIC MYELOID LEUKEMIA IN CHINA

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**OBJECTIVES:** Nilotinib has been recently approved as the 1st-line treatment of chronic myeloid leukemia (CML) in China. This study aimed to evaluate the long-term cost-effectiveness and budget impact of nilotinib used as the 1st-line tyrosine kinase inhibitor (TKI) in China. **METHODS:** A two-part Markov model was designed to evaluate the lifetime cost and health outcomes of 1st-line nilotinib versus 1st-line imatinib in CML patients. A distinction was made between patients who were still on treatment and who discontinued treatment at the 12th month. Patient's response was assessed for those still on treatment, and the level of response was assumed as the predictor of long-term outcomes. Clinical effectiveness was obtained from ENESTnd trial. Costs were obtained from Chinese literature review and a panel of local clinical experts and only the direct medical cost was included. A budget impact model was used to calculate the change in CML-related expenditures from a single payer perspective after nilotinib was introduced as the 1st-line TKI, compared to imatinib as 1st-line TKI. A discounted rate of 3% was used for both effectiveness and cost. **RESULTS:** The results of cost-effectiveness analysis indicated that 1st-line nilotinib was associated with longer survival (1.78 discounted life years), more QALY (1.77 discounted QALYs) and higher costs (CNY66,317), compared to 1st-line imatinib. The increased cost-effectiveness ratio was CNY37,454 per QALY gained, which was less than the GDP per capita of China in 2015. The direct medical cost decreased in each of the 5 years after nilotinib was introduced as 1st-line treatment. The total budget of 5 years decreased by 1.99% compared to the current scenario. **CONCLUSIONS:** The introduction of nilotinib as 1st-line treatment of CML in China is a highly cost-effectiveness strategy compared to the current scenario. Meanwhile, the total budget for the payer decreased in a substantial rate.

## PCN65

## ASSESSMENT OF COSTS ASSOCIATED WITH ADVERSE EVENTS IN PATIENTS WITH CANCER

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**OBJECTIVES:** This study assessed the incremental costs associated with adverse events (AEs) in a range of malignancies. **METHODS:** Using Truven Health Analytics