OBJECTIVES: Develop budget impact model to forecast total cost of treatment for cutaneous T-cell lymphoma (CTCL) for US public and private payer. METHODS: The clinical data and cost data were obtained from the published studies. Result: 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 were obtained from NCI-SEER and CDC databases. The budget 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-$500,000 per 1 million covered lives. The per patient per member (PPPM) budget impact of this treatment is 46–53 cents. Medical cost offsets were estimated but were insignificant compared to total cost of treatment. US payers rated PPPM output as the most important relevant outputs of model. CONCLUSIONS: This budget impact model shows that 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 impact of all therapies indicated for ultra-rare disorders, which might be an important consideration for future models.

OBJECTIVES: To evaluate the budget impact of nilotinib for newly diagnosed patients with chronic myeloid leukemia (CML) for the health care system in Bulgaria. METHODS: Current standard of therapy (imatinib) is compared with the newly available and for sale nilotinib and dasatinib used as a first line therapy. Cost of yearly pharmacotherapy and adverse drug reactions management have been calculated for 3 years for different proportions of newly diagnosed patients with CML in chronic phase. The exchange rate is 1 BGN = 0.51 EUR. RESULTS: Clinical studies have shown equivalent benefits for nilotinib but the question arises as to how much is the cost of therapy. Calculation of the yearly pharmacotherapy cost per 100 patients treats the medicines in monetary value order as follows: 5,398,092 BGN for imatinib, 6,564,681 BGN for nilotinib, and 8,365,872 BGN for dasatinib. Weighed cost by the probability of appearance of the ADR is 733.26 BGN for imatinib, 509.75 for nilotinib, and 1,010.29 BGN for dasatinib. CONCLUSIONS: The introduction of nilotinib as first line therapy for patients with newly diagnosed CML will lead to relatively small increase in the health care budget in Bulgaria compared to the clinical benefit in terms of achievement of deeper cytogenetic response, improvement of overall survival and less disease progression.

OBJECTIVES: Capécitabine (C) is approved in Brazil for the treatment of breast cancer in hormone or subsequent lines. In the private sector, it’s not often used, due to the fact that health insurance plans (HI) do not offer coverage for oral (PO) chemotherapy (CHEMO), only for intravenous (IV). Our aim was to determine if the use of C could spare costs if adopted by HI. METHODS: We searched Evidencias Database for BC patients eligible for the use of C, in the year of 2008. This database has information from over 2 million of users of 14 HI. We identified the IV CHEMO actually used and the costs paid. Then, based on the data of each individual patient and in the length of use of CHEMO, we calculated the associated costs in a scenario where C replaced the IV CHEMO used. Also, we performed some sensitivity analysis based on different percentages of substitutions of IV by PO CHEMO. We considered only the prices of drugs. RESULTS: We found 518 BC patients eligible for C use. These patients received 3581 cycles of chemotherapy (Falcitaxel, Docetaxel, Gemcitabine, Vinorelbine, Doxorubicin). The total cost for these treatments were US$ 5,364,285. If C replaced 100% of the IV CHEMO, the total cost would drop to US$ 2,078,082, 62% smaller than the IV alternative. In a simulation, where 60% of the patients would use the IV option and 40% would use C, the total cost would also be smaller: US$4,050,000, 25% smaller than when IV route is used exclusively. CONCLUSIONS: The adoption of C by HI in Brazil is cost-saving for BC patients.