

## PD215 Assessing Drug Pricing Disparities In Brazil's Public And Private Healthcare Sectors

Marcus Carvalho Borin ([marcusborin@gmail.com](mailto:marcusborin@gmail.com)),  
 Carina Rejane Martins, Daniel Pitchon dos Reis,  
 Geraldo Jose Coelho Ribeiro, Julia Teixeira Tupinambas,  
 Karina de Castro Zocrato,  
 Lelia Maria de Almeida Carvalho, Marcela Pinto de Freitas,  
 Maria da Gloria Cruvinel Horta, Mariana Michel Barbosa,  
 Mariza Cristina Torres Talim,  
 Sergio Adriano Loureiro Bersan and  
 Silvana Marcia Bruschi Kelles

**Introduction:** In Brazil, equitable access to medications is critical. There are significant pricing disparities between the National Health System and private health care, which are influenced by the National Committee for Health Technology Incorporation (CONITEC) and Law 14.307. This study investigated these disparities, with aim of proposing strategies for equitable access and sustainability in health care.

**Methods:** This analysis compared prices between the public and private sectors for trastuzumab and adalimumab. Public sector prices were obtained from the Health Prices Database (HPD) and private sector prices were obtained from the Unimed National Table of Materials and Medications (TNUMM), as of May 2023. The study evaluated the extent of pricing discrepancies, considering Drug Market Regulation Chamber ceiling prices and industry discounts.

**Results:** The cost of the trastuzumab biosimilar, KANJINTI® (Amgen Inc.), was BRL15.79 (USD3.24) per mg in the private sector, compared with BRL4.50 (USD0.92) per mg in the public sector (a 250% difference). The original version of adalimumab, HUMIRA® (AbbVie), was priced at BRL5,450.38 (USD1,120.53) in the TNUMM versus BRL2,445.46 (USD502.33) in the HPD (a 123% difference). The adalimumab biosimilar, HYRIMOZ® (Sandoz Inc.), was priced at BRL7,723.99 (USD1,586.87) in the TNUMM compared with BRL2,449.19 (USD503.05) in the HPD (a 215% price discrepancy).

**Conclusions:** The study highlights significant disparities in drug pricing between Brazil's public and private healthcare sectors. These disparities affect the financial sustainability of private health entities and elevate costs for consumers, potentially increasing reliance on the National Health System. Policy revisions, price parity strategies, and further studies are vital for a sustainable healthcare system.

## PD216 Efficiency Frontier Analysis: Supporting Sustainable Non-Small Cell Lung Cancer Healthcare Policies In Brazil

Marcus Carvalho Borin ([marcusborin@gmail.com](mailto:marcusborin@gmail.com)),  
 Carina Rejane Martins, Daniel Pitchon dos Reis,  
 Geraldo Jose Coelho Ribeiro, Julia Teixeira Tupinambas,  
 Karina de Castro Zocrato,  
 Lelia Maria de Almeida Carvalho, Marcela Pinto de Freitas,  
 Maria da Gloria Cruvinel Horta, Mariana Michel Barbosa,  
 Mariza Cristina Torres Talim,  
 Sergio Adriano Loureiro Bersan and  
 Silvana Marcia Bruschi Kelles

**Introduction:** Informed healthcare policies in Brazil rely on robust health technology assessment (HTA), especially for conditions like non-small cell lung cancer (NSCLC). We present an efficiency frontier analysis to evaluate NSCLC treatments that correlates annual treatment costs with clinical outcomes, offering a systematic approach to enhance decision-making in the Brazilian healthcare context.

**Methods:** This quantitative study analyzed NSCLC drug costs within the Brazilian healthcare system and the clinical efficacy data of pivotal studies. The data were analyzed using Python and R software. The dataset comprised drug costs and hazard ratios for overall survival. After data preparation, which involved normalization and outlier management, we constructed an efficiency frontier by ranking drugs based on cost and effectiveness. A linear regression model was then developed to extrapolate this frontier, deriving a formula that predicts treatment costs for specified improvements in overall survival.

**Results:** The analysis delineated an efficiency frontier and revealed cost-effective NSCLC treatments in Brazil. The following linear regression equation was derived: overall survival =  $(1.033551 - 0.000003) \times \text{treatment cost (USD)}$ . This allows for the estimation of appropriate treatment costs for new therapies based on their expected clinical outcomes. This initial model provides a foundation for estimating the economic impact of new treatments.

**Conclusions:** This preliminary efficiency frontier analysis offers a novel perspective for evaluating NSCLC treatment strategies in Brazil to support sustainable healthcare policy decisions. The model is subject to limitations due to the absence of a systematic literature review. However, it represents an initial step towards a more comprehensive HTA framework. Further research should refine the model by including systematic data collection and analysis.