

BUDGET ANALYSIS OF IMPLEMENTATION OF BIOSIMILARS IN A PRIVATE HEALTH INSURANCE COMPANY OF LARGE SIZE IN SOUTHERN BRAZIL



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BACKGROUND

The cost of treating immune-mediated diseases is a challenge for most private insurers in Brazil. Biosimilar drugs are therapeutic options to help achieve economic balance, but their expansion faces several challenges. Demonstrating the economic benefit and the possibilities of expanding their access can help accelerate implementation.

OBJECTIVES:

To evaluate the pharmaceutical expenditure impact of a managed switch process from reference biologics o Biosimilars based on Real-Word costs in a Brazilian Private Health Plans covering 130,000 lives.

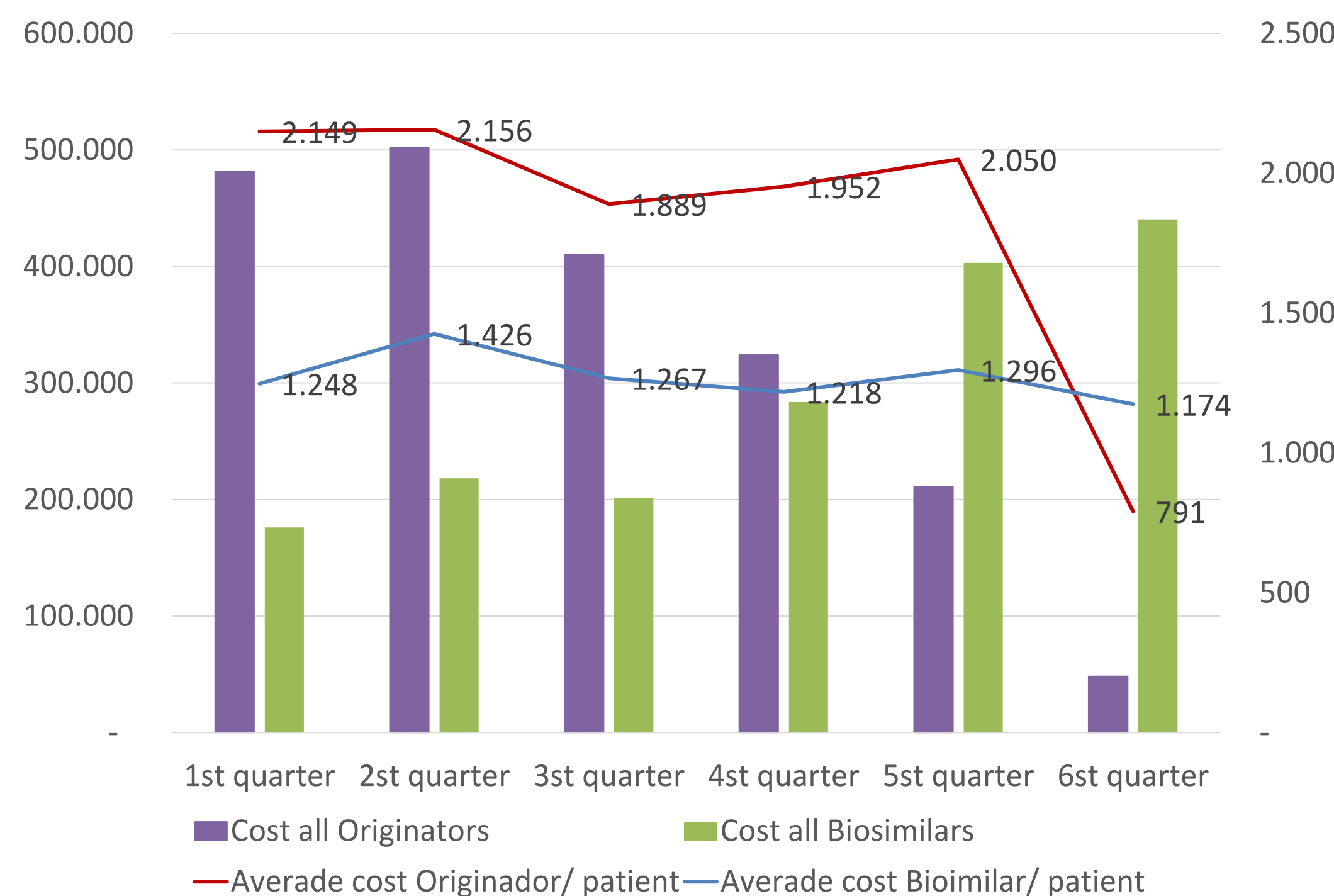
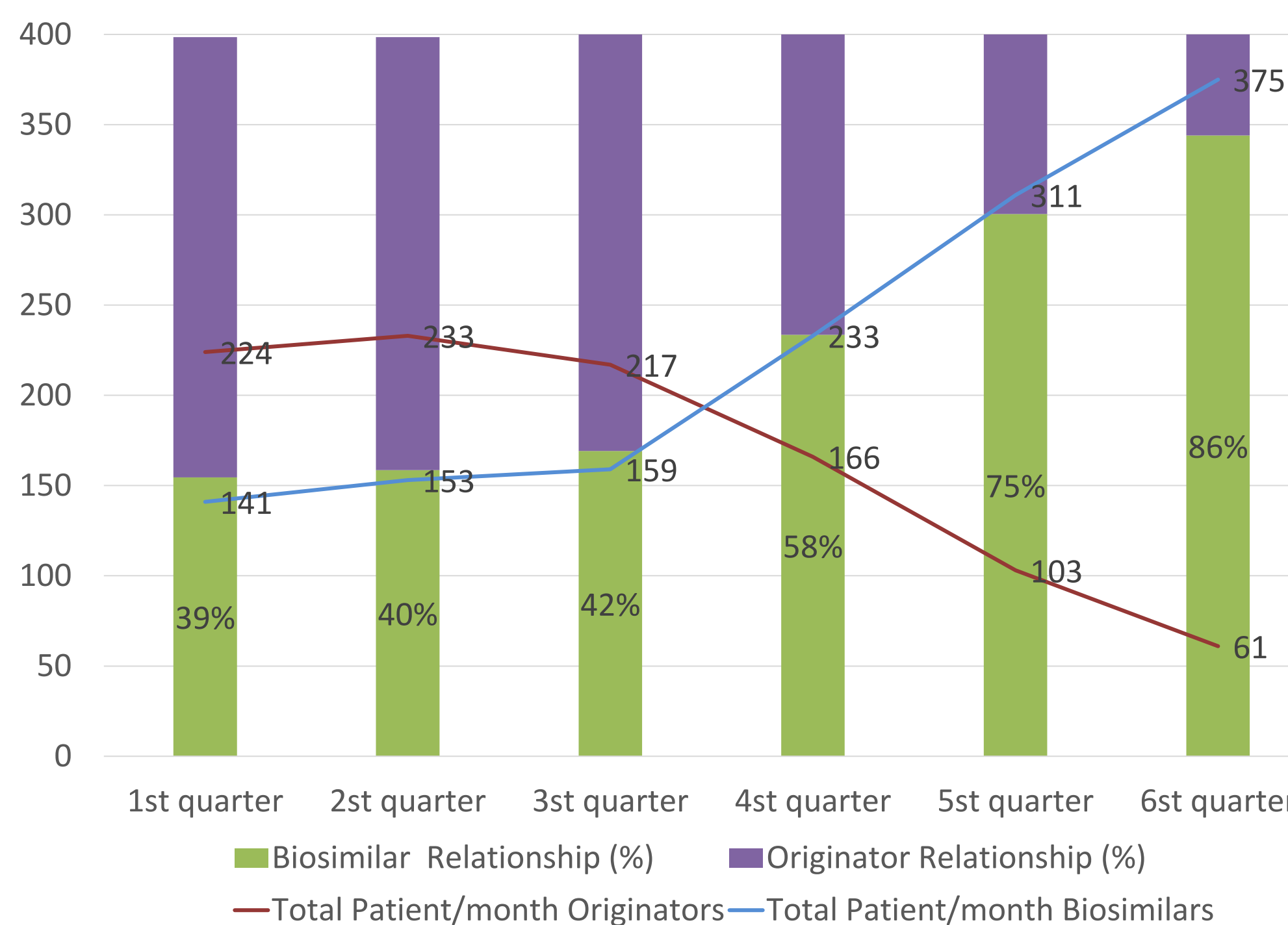
METHODS:

a) **MODELING:** Observational, retrospective study, real-world database, single center, payer perspective and private health. We develop a budget model and estimate savings switching to biosimilars between 24 months (November 2023 to October 2024) using the payer perspective. The clinical indications for payment and reimbursement were those approved by Brazilian Regulatory Agency for Private Health Insurance and Plans (ANS), in addition to technical evaluation by the insurer's medical audit. The number of cases treated each month considers a natural movement in the user portfolio (entries and exits), for common clinical and administrative reasons in an insurer's portfolio. The number of patients per month is an index that is calculated by adding up the patients who received treatment in the same month.

a) **MEDICATIONS ANALYZED:** Infliximab, Adalimumab, Etanercept, Rituximab, Trastuzumab and Bevacizumab. The exchange of original molecules for biosimilars followed the agreement of the patient's attending physician. The reimbursement value reference follows the insurer's own standardized list and did not undergo any methodological changes during the study period .In the first year, only naïve patients received biosimilars, and in the second year there was also a switch in patients who were already using reference biologics. The costs related to treatment were extracted from the payer's claim database and analyzed with dynamic data panel in MS Excel. There are no changes on the reimbursement reference list during the analyzed period. The data was taken from the insurer's management system. Values converted from Brazilian Real (R\$) to US Dollar (US\$) at the time of the study: R\$6:US\$1.

RESULTS:

A 2-year cost comparison of infliximab, Adalimumab, Etanercept, Rituximab, Trastuzumab and Bevacizumab biosimilars versus reference biologicals was performed. Different conversion rates were observed in different medical specialties. The highest conversions were in oncology drugs such as Bevacizumab (100%), Trastuzumab (98%) and Rituximab (100%) at the end of the period. The total cost avoided in 24 months was USD 1,488,290.73 in 1131 patients/month. Savings per molecule in USD (and quantity of patients in use / month) was Infliximab USD 318,796.71 (242); Adalimumab USD 897,822.61 (745); Rituximab USD 33,100.98 (2); Etanercept USD 3,404.15 (3); Bevacizumab USD 37,080.80 (121); Trastuzumab USD 198,085.47 (239). In the sixth quarter, the pricing negotiation policies between the originator and biosimilar for the molecules Adalimumab and Infliximab were equal, downwards, considering the average market price of biosimilars. As a result, we observed a drop in the graph in this last quarter, explained by the reduction in price together with the high number of patients undergoing treatment with these molecules **The usage of Biosimilars increased from 39% in November 2022 to 86% in October 2024 when compared to the originator.** **Significant reduction in average cost per patient was observed and more patients had access to treatment.**



CONCLUSIONS:

The use of biosimilars in Brazil has expanded, but entry and acceptance by both prescribers and healthcare providers remains challenging. The entry of biosimilars also contributed to the reduction in the average cost of treatment, not only by offering lower prices, but also by stimulating market competition on the originator's price.

There are regulatory, economic and technical challenges that need to be addressed. There is potential for increased access, significant cost reduction and financial sustainability for a mid-sized insurer in Brazil.

MOLECULE	1st Quarter - % patient month with Bios	6st Quarter - % patient/month BioS
	nov/22	Oct/24
INFLIXIMAB	43%	86%
ADALIMUMAB	37%	66%
RITUXIMAB	60%	100%
ETANERCEPT	0%	21%
BEVACIZUMAB	0%	100%
TRASTUZUMAB	77%	98%
	Average	Average
TOTAL	39%	86%

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