EE100

# Cost Per Progression Free Survival Analysis of the Currently Available Treatments for Patients with Refractory/ Relapsed Mantle Cell Lymphoma in the Brazilian Health System

Pedro Agostinho[1], Pamela Azevedo[1], Jorge Albarran[1]

[1]Johnson & Johnson Innovative Medicine

## Key Takeaway

Considering its cost profile and assessed PFS, I+V could represent an optimal treatment choice for patients with R/R LCM in the Brazilian health system.

## Conclusions

I+V demonstrated higher PFS when compared to every sequencing strategy utilized in this study;

I+V demonstrated lower cost per month of PFS when compared to zanubrutinib followed by pirtobrutinib, or ibrutinib followed by pirtobrutinib.

## Study Limitation

This study does not represent a direct comparison of data. It provides a naïve comparison, with each asset compared independently.

**Presented at ISPOR 2026 – International Society for Pharmacoeconomics and Outcomes Research, 2026. Philadelphia, PA, USA. May 17th to 20th, 2026**

## Introduction & Objective

- Mantle cell lymphoma (MCL) represents a rare subtype within the spectrum of non-Hodgkin Lymphoma (NHL), with biological, molecular, and clinical characteristics, accounting for approximately 2% to 10% of all NHL cases[1,2];
- The annual incidence of MCL is relatively low when compared to other B-cell lymphoma subtypes. In the United States (USA), the age-adjusted incidence rate ranges from 0.51 to 0.55 cases per 100,000 people, corresponding to an estimated population of approximately 15,000 patients currently living with MCL. The disease predominantly affects elderly individuals, with a median age at diagnosis around 68 years[1,3]. In Brazil, although population data is scarce, recent real-world studies suggest that the epidemiological profile is similar to that of developed countries[4];
- MCL has a significant impact on the quality of life of patients and their families, mainly due to the chronic and recurrent nature of the disease. This aspect is also related to the high frequency of hospitalizations, outpatient visits, and the need for multiple lines of treatment[5];
- The objective of this study is to compare the cost per month of progression free survival (PFS) of therapeutic treatment sequencing strategies considering the treatments with local regulatory label approval for refractory/ relapsed mantle cell lymphoma (R/R MCL) in the Brazilian health system.

## Methods

- A sequencing model was developed on Microsoft Excel in order to perform the necessary calculations and data modelling;
- This analysis evaluated treatment sequencing strategies involving therapies with regulatory label approval for R/R MCL in Brazil. The therapies included were: ibrutinib plus venetoclax (I+V), ibrutinib, acalabrutinib, zanubrutinib, and pirtobrutinib;
- Ibrutinib, acalabrutinib, zanubrutinib, and the combination of ibrutinib plus venetoclax are approved for use in the second line of treatment (2L), while pirtobrutinib is approved for use in the third line of treatment (3L);
- The analysis compared the progression-free survival and associated costs of I+V with the following treatment sequencing:
  - Ibrutinib followed by pirtobrutinib;
  - Acalabrutinib followed by pirtobrutinib;
  - Zanubrutinib followed by pirtobrutinib.
- Progression-free survival data were obtained from published follow-up studies of each therapy;
- Only drug acquisition costs were considered, based on the dosage recommended in the regulatory approved drug labels;
- Drug prices were retrieved from the official Brazilian drug price list (CMED 2025);
- The cost per month of progression-free survival was calculated by dividing the total treatment cost incurred during the median PFS period by the corresponding median PFS duration (in months);
- The exchange rate considered was 1 BRL = 0,1801 USD.

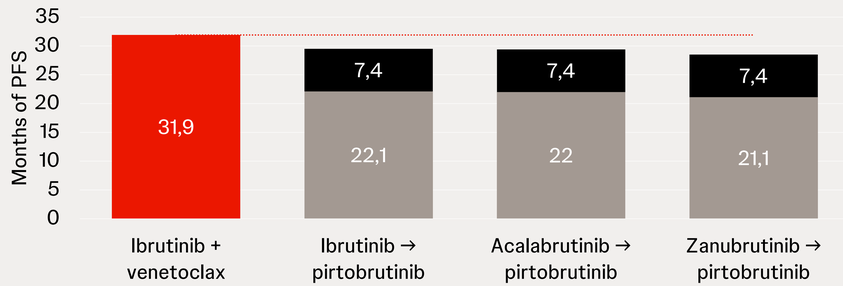
***Table 1: Treatment costs in BRL and USD***

| | Calculated treatment cost (BRL) | Calculated treatment cost (USD) |
|---|---|---|
| Ibrutinib + venetoclax | R$ 2.882.012 | $ 519.050 |
| Zanubrutinib | R$ 894.789 | $ 496.412 |
| Acalabrutinib | R$ 650.964 | $ 452.500 |
| Ibrutinib | R$ 1.280.554 | $ 565.889 |
| Pirtobrutinib | R$ 1.861.527 | $ 335.261 |

## Results

- I+V showed longer PFS results compared with the PFS of ibrutinib, acalabrutinib or zanubrutinib followed by pirtobrutinib (31.9 vs. 29.5, 29.4 and 28.5 months, respectively) .

***Figure 1: Total assessed PFS by sequencing strategy***




- I+V showed lower cost per month of PFS compared with the cost per month of PFS of ibrutinib or zanubrutinib followed by pirtobrutinib ($16.2 thousand [k] vs $19.1k and $17.4k, respectively) – as for acalabrutinib followed by pirtobrutinib, I+V showed 5,7% higher cost per month of PFS ($16.2k vs $15.4k), but 8,5% higher PFS.

***Table 2: Cost per month of PFS by sequencing strategy***

| | Calculated treatment cost (USD) | Total assessed PFS | Calculated cost per month of PFS |
|---|---|---|---|
| Ibrutinib + venetoclax | $ 519.050 | 31,9 | $ 16.271 |
| Ibrutinib → pirtobrutinib | $ 565.889 | 29,5 | $ 19.183 |
| Acalabrutinib → pirtobrutinib | $ 452.500 | 29,4 | $ 15.391 |
| Zanubrutinib → pirtobrutinib | $ 496.412 | 28,5 | $ 17.418 |

- The results demonstrate that I+V provides the longest assessed PFS vs the alternatives, supporting better disease control and effective patient treatment;
- I+V shows a cost per month of PFS that positions it favorably vs the alternatives;
- I+V combines high clinical outcomes with efficient use of resources, reinforcing its therapeutic value.

**References**

1. Smedby KE, Hjalgrim H. Epidemiology and etiology of mantle cell lymphoma and other non-Hodgkin lymphoma subtypes. Vol. 21, Seminars in Cancer Biology. 2011. p. 293–8; 2. Dreyling M, Campo E, Hermine O, Jerkeman M, Le Gouill S, Rule S, et al. Newly diagnosed and relapsed mantle cell lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Annals of Oncology. 2017 Jul;28:iv62–71; 3. Wang Y, Ma S. Risk Factors for Etiology and Prognosis of Mantle Cell Lymphoma HHS Public Access. Expert Rev Hematol. 2014;7(2):233–43; 4. Santos V, Figorelle L, Marimon P, Brito L, Siqueira V, Baptista R, et al. EPIDEMIOLOGIA DO LINFOMA DA CÉLULA DO MANTO NO BRASIL – ANÁLISE DO BANCO DE DADOS DO GRUPO BRASILEIRO DE LINFOMA DA CÉLULA DO MANTO. Hematol Transfus Cell Ther. 2023 Oct;45:S370; 5. Pophali PA, Thanarajasingam G. Understanding Health-Related Quality of Life in Patients with Mantle Cell Lymphoma. Hematol Oncol Clin North Am [Internet]. 2020 Oct 1 [cited 2025 Jun 14];34(5):971. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC7459143/