

Treatment Patterns and Outcomes in the Second and Third Lines and After Triple-class Exposure: Subanalysis of the Latin American Multiple Myeloma Registry Study (MYLACRE)

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Key Takeaway



This snapshot of the profile, treatment patterns and outcomes of patients with MM in Latin America who receive LOT2 and LOT3, and after they become TCE, suggests insufficient access to novel agents and relatively poor outcomes, with median OS of 26.1 months in LOT2, 14.5 months in LOT3, and 13.4 months in TCE patients

Conclusions



There is considerable heterogeneity in the treatment of patients with MM in Latin America who receive LOT2 and LOT3, and after they become TCE, suggesting a lack of standard of care in the real world



The difference between real-life drug use and international guidelines could also be determined by access barriers in this world region



The short duration of OS, especially after patients become TCE, highlights the importance of more effective treatment options to improve outcomes in Latin America



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Poster

Narrated poster video

Supplementary material

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Introduction

- MYLACRE (Latin American Multiple Myeloma Registry Study (NCT03955900) was a multicenter, non-interventional registry of 1029 patients with multiple myeloma (MM) in Argentina, Brazil, Colombia, Mexico, and Panama¹
- In Latin America, treatment patterns for MM vary widely and often differ from those recommended by practice guidelines, usually as a result of limited access to novel agents²
- Likewise, the management of triple-class exposed (TCE) patients is evolving but is still severely constrained in Latin America
- We investigated characteristics, treatment patterns and outcomes for patients enrolled in MYLACRE who received second (LOT2) and third (LOT3) lines of therapy, as well as TCE patients

Results

LOT2 AND LOT3

DEMOGRAPHIC CHARACTERISTICS OF PATIENTS TREATED IN LOT2 AND LOT3

Of 1029 patients originally analyzed in MYLACRE, 405 and 167 entered the LOT2 and LOT3 Populations, respectively (Table 1)

Table 1. Selected baseline characteristics of patients treated in LOT2 and LOT3.		
Characteristics	LOT2 (n=405)	LOT3 (n=167)
Age, years		
Median [IQR]	65 [57 to 72]	65 [57 to 71]
Mean [SD]	64.2 [11.0]	63.6 [10.9]
Range	32 to 88	32 to 88
Sex		
Female	220 (54.3%)	97 (58.1%)
Male	185 (45.7%)	70 (41.9%)
ISS stage		
1	85 (21.0%)	33 (19.8%)
2	97 (24.0%)	39 (23.4%)
3	164 (40.5%)	69 (41.3%)
Unknown	59 (14.6%)	26 (15.6%)
Eligibility to transplantation		
Eligible	220 (54.3%)	86 (51.5%)
Ineligible	134 (33.1%)	55 (32.9%)
Unknown	51 (12.6%)	26 (15.6%)
Type of institution (excluding one case of 'unknown')		
Public	122 (30.2%)	38 (22.8%)
Private	282 (69.8%)	129 (77.2%)

TREATMENT PATTERNS OF PATIENTS IN LOT2 AND LOT3

Table 2 shows treatments patterns in LOT2 and LOT3

Table 2. Treatment regimens used in LOT2 and LOT3, considering the use of PI, IMiD and anti-CD-38.		
Characteristics	LOT2 (n=405)	LOT3 (n=167)
Regimen containing an anti-CD38 antibody	106 (26.2%)	31 (18.6%)
Regimen containing a PI, but no IMiD and no anti-CD38	86 (21.2%)	45 (26.9%)
Regimen containing an IMiD, but no PI and no anti-CD38	90 (22.2%)	30 (18.0%)
Regimen containing a PI and and IMiD, but no anti-CD38	105 (25.9%)	39 (23.3%)
Other regimens	18 (4.4%)	22 (13.2%)

References

1. Hungria V, et al. Health care systems as determinants of outcomes in multiple myeloma: final results from the Latin American MYLACRE study. Blood Adv 2025;9:1293-1302.
2. Kerbaui LN, et al. Hematological approaches to multiple myeloma: trends from a Brazilian subset of hematologists. A cross-sectional study. Sao Paulo Med J 2016;134:335-341.

Methods

In MYLACRE, patients diagnosed with MM between 01/2016 and 06/2021 were eligible, data were retrospectively collected between 05/2019 and 06/2022, and treatment was left to the discretion of investigators

We defined three populations for analysis:

- LOT2 Population, comprising all patients who had an entry for the start date of LOT2
- LOT3 Population, comprising all LOT2 Population patients with an entry for the start date of LOT3
- TCE Population, comprising all patients who received ≥1 proteasome inhibitor (PI), ≥1 immunomodulatory drug (IMiD), and ≥1 anti-CD38 antibody, regardless of treatment duration, but with at least one subsequent LOT after becoming TCE

LOT2 AND LOT3 (Continued)

TREATMENT PATTERNS OF PATIENTS IN LOT2 AND LOT3 (Continued)

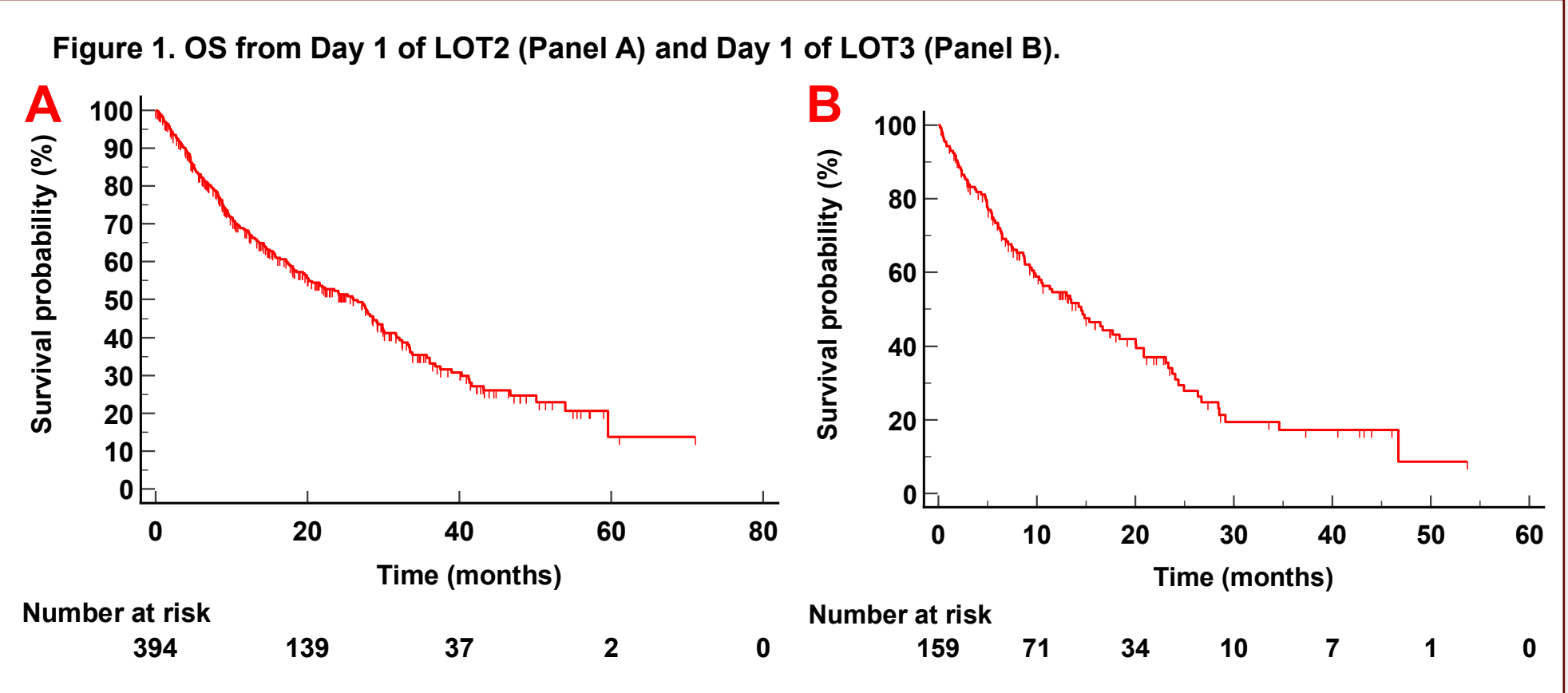
- In LOT2, the most frequently used PI, IMiD, and anti-CD38 were bortezomib (41.0%), lenalidomide (41.0%), and daratumumab (26.2%)
- Other agents used in >10% were carfilzomib (17.0%) and thalidomide (19.3%)
- In LOT3, the most frequently used PI, IMiD, and anti-CD38 were carfilzomib (26.9%), lenalidomide (34.7%), and daratumumab (18.6%)
- Bortezomib (25.7%) and thalidomide (10.8%) were the next most frequently used agents
- Regarding treatment received before starting the current LOT:
- For LOT2 patients, only 2% had received an anti-CD38 antibody in LOT1
- For LOT3 patients, 22.7% had received an anti-CD38 antibody in LOT1 or LOT2

TTNT

- The median TTNT from Day 1 of LOT2 to Day 1 of LOT3 was 21.2 months (95% confidence interval [CI], 17.3 to 25.3 months)
- The median TTNT from Day 1 of LOT3 to Day 1 of LOT4 was 12.2 months (95% CI, 9.0 to 19.4 months)

OS

- 394 of 405 patients from the LOT2 Population could be analyzed for OS (Figure 1, Panel A)
- The median OS was 26.1 months (95% CI, 20.1 to 29.1 months), with 50.5% of patients deceased at data cutoff
- 159 of 167 patients from the LOT3 Population could be analyzed for OS (Figure 1, Panel B)
- The median OS was 14.5 months (95% CI, 10.2 to 20.0 months), with 58.5% of patients deceased at data cutoff



- The primary objectives were to describe treatment patterns in LOT2 and LOT3, and to estimate the proportion of TCE patients. Secondary objectives were to characterize the three populations and to investigate TTNT and OS
- Agents of interest (PIs, IMiDs, and anti-CD38 Abs) were analyzed individually
- We used the Kaplan-Meier method to analyze two outcomes of interest:
 - Time to next treatment (TTNT), defined as the time between the Day 1 of the LOT of interest (LOT2 or LOT3; for TCE patients, TTNT was defined from Day 1 of the first LOT after which patients became TCE) and Day 1 of the subsequent LOT, censoring patients not initiating the next LOT at the date of last visit for those alive or lost to follow-up, or at the date of death otherwise
 - Overall survival (OS), defined as the time between Day 1 as defined above and death, censoring patients alive or with no survival information at last follow-up

TCE PATIENTS

PROPORTION OF TCE PATIENTS

- A total of 166 (16.1%) patients had a record of treatment with ≥1 PI, ≥1 IMiD, and ≥1 anti-CD38 at any point
- Of these patients, 48 (28.9%) initiated a subsequent LOT and entered the TCE Population
- These patients became TCE thus defined after LOT1 (n=5), LOT2 (n=27), LOT3 (n=8), or later (n=8)
- Therefore, 48 of 1029 patients in MYLACRE were TCE thus defined, i.e., 4.7% (95% CI, 3.5 to 6.2%)

DEMOGRAPHIC CHARACTERISTICS OF TCE PATIENTS

- Selected baseline characteristics of TCE and MYLACRE patients overall are shown in Table 3

Table 3. Selected baseline characteristics of TCE patients and MYLACRE patients overall. ¹		
Characteristics	TCE (N=48)	MYLACRE (N=1029)
Mean age, years [SD]	62.9 [11.4]	63.4 [11.4]
Female sex	26 (55.3%)	534 (50.9%)
Eligibility to transplantation		
Eligible	32 (66.7%)	595 (57.8%)
Ineligible	10 (20.8%)	280 (27.2%)
Unknown	6 (12.5%)	154 (15.0%)
Type of institution (excluding unknown)		
Public	3 (6.2%)	339 (32.9%)
Private	45 (93.8%)	682 (66.3%)
Unknown	0	8 (0.8%)

TREATMENT PATTERNS AFTER TRIPLE-CLASS EXPOSURE

Considering agents belonging to the PI, IMiD, and anti-CD38 classes, carfilzomib was the agent most frequently used in the first LOT after triple-class exposure (52.1%), followed by lenalidomide (22.9%), pomalidomide (20.8%), daratumumab (18.8%), and thalidomide (10.4%)

TTNT and OS

- Of the 48 patients in the TCE Population, 45 could be analyzed for TTNT and OS
- The median TTNT was 9.5 months (95% CI, 5.9 to 19.4 months)
- The median OS was 13.4 months (95% CI, 10.6 to 17.7 months)

