A Real-World Perspective of Quadruple Treatment Patterns for 1L Multiple Myeloma Patients Across North and South America, Europe, and Asia

Tatiana Checchia, MBA[1]; Kelechi Emeanuru, MPH[2]; Mariah Baltezegar, MBA[2]; Luis Pelloso, MD, PhD[3]

[1]Thermo Fisher Scientific, Prague, Czech Republic; [2]Thermo Fisher Scientific, Waltham, MA, USA, [3]Thermo Fisher Scientific, Sao Paulo, Brazil

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Background

- Recent combination therapies, such as quadruple (QD) therapy, have become the preferred first-line (1L) treatment option for multiple myeloma (MM) patients.
- These QD combinations have proved to be safer and more effective for MM patients, offering prolonged and sustained responses over time.
- Changes to the 2025 NCCN guidelines include an update to the list of primary regimens for MM 1L in stem cell transplantation (SCT) eligible patients, moving the QD therapy, daratumumab + bortezomib + lenalidomide + dexamethasone (D-VRd), from other recommended regimens to a preferred regimen (category 1) and adding the QD therapy, isatuximab-irfc + bortezomib + lenalidomide + dexamethasone (Isa-VRd) to other recommended regimens.
- Isa-VRd QD therapy was also added for MM 1L SCT ineligible patients as preferred regimens (category 1).

Objectives

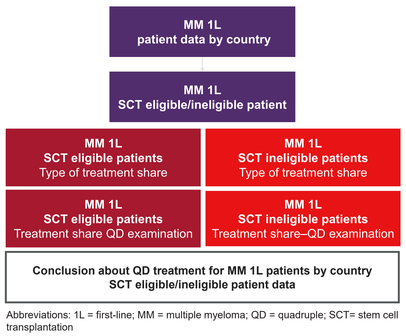
- **The objective of this study is to identify and examine QD treatment patterns among 1L MM patients across different countries in the top 10 markets (Brazil, Mexico, US, France, Germany, Italy, Spain, UK, China, and Japan).**

Methods

Patients who received at least one line of therapy were identified through PPD™ Oncolocator™ Global Cancer Treatment Patterns™, a real-time data collection tool, to examine treatment patterns reported by healthcare providers (HCPs) (**Figure 1**).

- Data were collected on 1L MM patients from December 2022 to November 2024 who were treated with a drug combination that specifically includes a proteasome inhibitor, an immunomodulatory drug, a steroid, and anti-CD38 called as QD.

Figure 1. PPD™ Oncolocator™ Global Cancer Treatment Patterns MM 1L Data Examination



Abbreviations: 1L = first-line; MM = multiple myeloma; QD = quadruple; SCT= stem cell transplantation

Results

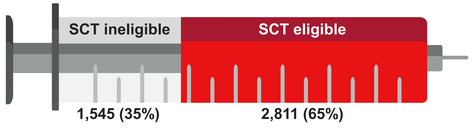
- A total of 4,356 patients were included in the cohort, with an average of 425 patients per country. Among those 1L MM patients, 65% (n=2,811) were SCT eligible, and 35% (n=1,545) were SCT ineligible (**Table 1**) and (**Figure 2**).

Table 1. MM 1L Patients by Country

Country	Total No. of MM 1L Patients	Total % of MM 1L Patients
Italy	551	13%
Spain	547	13%
Brazil	497	11%
China	478	11%
Japan	478	11%
US	464	11%
Germany	400	9%
France	388	9%
UK	333	8%
Mexico	220	5%
Grand Total	**4,356**	**100%**

Abbreviations: 1L = first-line; SCT= stem cell transplantation
Data: PPD™ Oncolocator™ Global Cancer Treatment Patterns™, November 2022 –December 2024, MM 1L patients (n=4,356).

Figure 2. MM 1L Patients by SCT Status

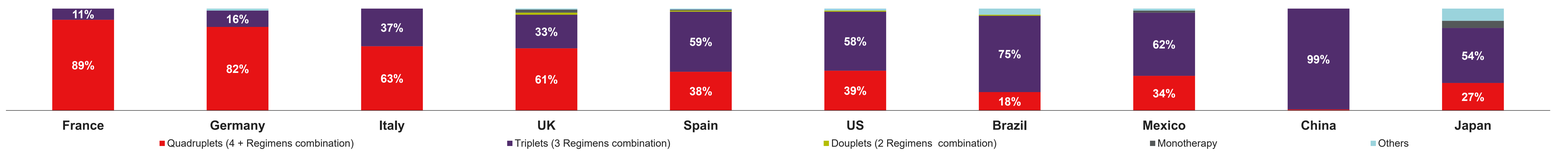


Abbreviations: 1L = first-line; MM = multiple myeloma; SCT= stem cell transplantation
Note: SCT eligible includes patients who have undergone SCT.
Data: PPD™ Oncolocator™ Global Cancer Treatment Patterns™, November 2022–December 2024, MM 1L patients (n=4,356).

MM 1L SCT Eligible Patients

- Among 1L SCT eligible patients (n=2,811), the average number of patients per country was 281 patients (n=131–434).
- QD treatment use was highest in France (89%), followed by Germany (82%), Italy (63%), and the UK (61%) (**Figure 3**).

Figure 3. Treatment Share by Combination Type (MM 1L SCT Eligible Patients)



Abbreviations: 1L = first-line; SCT= stem cell transplantation; SRE = skeletal-related events; Note: Other includes pain management, SRE, palliative care, or those reported as other.; Data: PPD™ Oncolocator™ Global Cancer Treatment Patterns™, November 2022–December 2024, MM 1L patients (n=2,811).

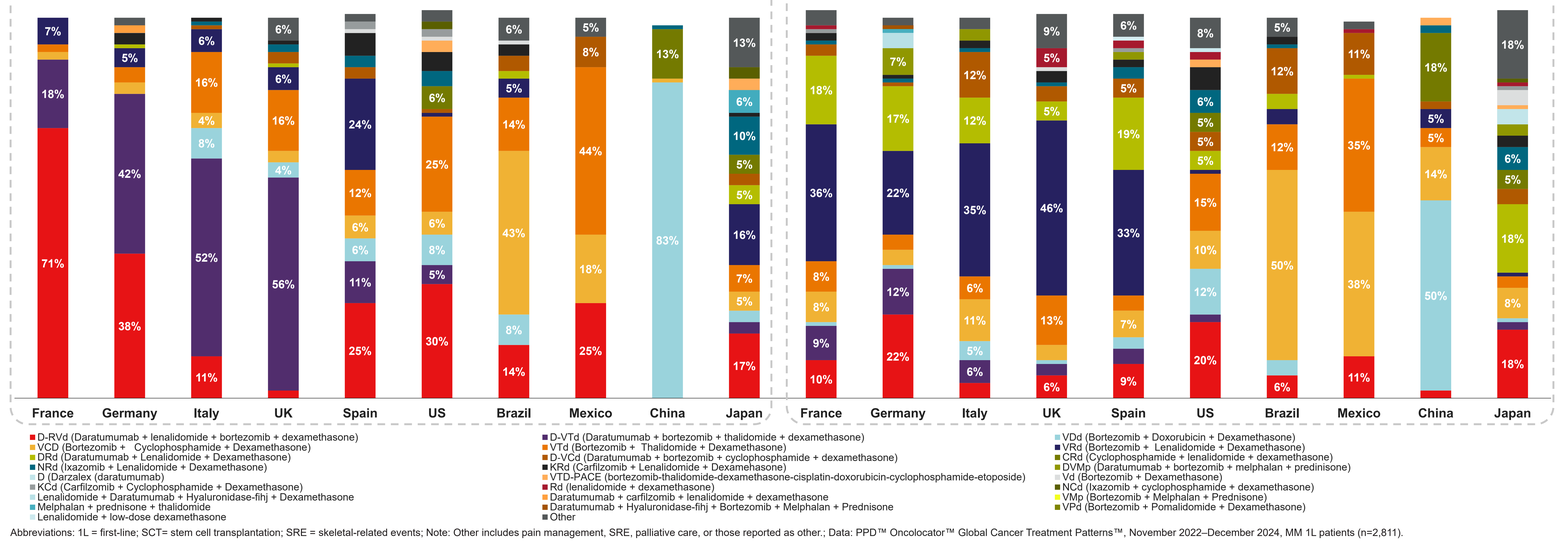
Figure 4. Treatment Share by Country (MM 1L SCT Eligible and Ineligible Patients)

MM 1L STC Eligible Patients

- Among 1L SCT eligible patients, the QD treatment D-VRd was most common in France (71%), Spain (25%), US (30%), and Japan (17%). Daratumumab + bortezomib + thalidomide + dexamethasone (D-VTd) was the preferred regimen in the UK (56%), Italy (52%), and Germany (42%).
- Triple treatment combinations like bortezomib + cyclophosphamide + dexamethasone (VCd) were most adopted in Brazil (43%), bortezomib + thalidomide + dexamethasone (VTd) in Mexico (44%), and bortezomib + doxorubicin + dexamethasone (VDd) had the highest adoption in China (83%).

MM 1L STC Ineligible Patients

- Among 1L SCT ineligible patients, triplet regimens were preferred. VRd was used in the UK (46%), Italy (35%), France (35%), and Spain (33%). VCd was the preferred regimen in Brazil (50%) and Mexico (38%), while VDd was predominant in China (50%).
- However, the QD regimen, D-RVd. was the main prescription choice in the US (20%) and was similarly important as VRd in Germany (22%) and as DRd in Japan (18%).



Abbreviations: 1L = first-line; SCT= stem cell transplantation; SRE = skeletal-related events; Note: Other includes pain management, SRE, palliative care, or those reported as other.; Data: PPD™ Oncolocator™ Global Cancer Treatment Patterns™, November 2022–December 2024, MM 1L patients (n=2,811).

Conclusions

- **Contemporary real-world data on QD trends reflect an evolving landscape, particularly with treatment patterns for SCT eligible MM patients across the US and EU regions.**
- **Examining QD standards and trends across various countries and time periods can help stakeholders and communities enhance their understanding of the adoption rates of the most recent treatment approvals.**
- **Monitoring data on QD patterns will provide valuable insights into any persistent market changes, as additional assessments are needed to evaluate the global use of QDs.**

References

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