Current Treatment Patterns and Survival in Relapsed or Refractory Multiple Myeloma: Findings From a Brief Survey of European Physicians

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INTRODUCTION

- Multiple myeloma (MM) is a malignancy of clonal plasma cells, a type of white blood cell responsible for producing antibodies.
- MM accounts for an estimated 0.8% (114,000) of all new cancer cases annually and 0.9% (63,000) of all cancer deaths annually worldwide.[1,2]
- Despite advancements in induction and maintenance therapies leading to improved rates and duration of response, as well as improved overall survival, virtually all patients with MM eventually relapse and die from disease progression.[3]
- Few data from real-world clinical settings in Europe are available describing treatment patterns and survival of MM patients in the relapsed/refractory setting.
- This study begins to address this knowledge gap using data from a brief physician survey.

METHODS

- A cross-sectional survey of 61 physicians treating relapsed/refractory MM (RRMM) in France (n = 21), Germany (n = 20), and the United Kingdom (n = 20) was conducted in November 2014.
- The survey collected physicians' opinions on typical treatment patterns and survival of patients with MM in the relapse/refractory setting (i.e., following disease progression during or after completion of first-line therapy).
- Analyses were descriptive and exploratory.
- We report results from pooled analyses (all countries combined), with no country-level stratification.

RESULTS

Respondent Characteristics

- The respondents were evenly distributed by practice specialty (44% hematology, 51% oncohematology), with 5% of physicians specializing in medical oncology (Table 1).
- Academic/teaching hospitals were the most common practice setting for these physicians (59% of the sample).

Table 1. Characteristics of Survey Respondents

	n	%
All physicians	**61**	**100.0**
Specialty		
Hematology	27	44.3
Oncohematology	31	50.8
Medical oncology	3	4.9
Practice setting		
Academic/teaching hospital	36	59.0
Nonteaching hospital	15	24.6
Free-standing oncology clinic	1	1.6
Cancer center	4	6.6
No response	5	8.2
Mean (SD) past-year MM caseload	**53.0 (33.0)**	

SD = standard deviation.

Risk Classification of New MM Cases

- The responding physicians were asked to provide their opinion, based on experience, on what the risk distribution is for newly diagnosed MM cases. Figure 1 presents results of this query.
- On average, the participating physicians indicated that 21% of new MM cases are high-risk; standard-risk and low-risk patients account for 39% and 27% of new MM cases, respectively, based on average physician responses.

Median Survival

- Physicians were asked to provide their opinion on what they believe to be median survival from first relapse for patients with RRMM. The question was administered as a multiple-choice, mutually exclusive categorical response, with categories for < 1 month, 1-3 months, 4-6 months, 7-9 months, 10-12 months, and > 12 months.
- The proportion of physicians reporting median survival of > 12 months was lowest (16%) for high-risk patients and highest (82%) for low-risk patients (Figure 2).
- For high-risk patients, the most common physician response was 10-12 months (31%), followed closely by 7-9 months (26%) and 4-6 months (21%) (Figure 2).
- No physician believed that median survival is less than 1 month for any of the risk groups.

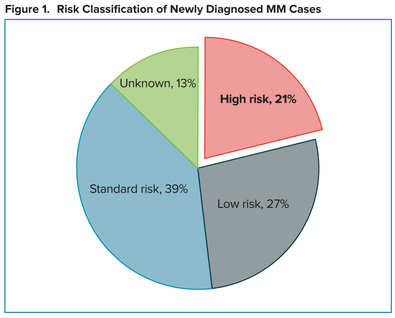
First- and Second-Line Treatment Choices

- Physicians were asked to indicate what proportion of patients (by stem cell transplant [SCT] eligibility status) they expected to initiate various treatment regimens as part of first-line or induction therapy. Figure 3 presents the distribution of these responses.
- VELCADE plus cyclophosphamide plus dexamethasone (VCD) and VELCADE plus Thalomid plus dexamethasone (VTD) were, by far, the most common (28% and 20%, respectively) first-line regimens that SCT-eligible patients with newly diagnosed MM were expected to initiate (Figure 3).
- For SCT-ineligible patients, VELCADE plus melphalan plus prednisone (VMP) and melphalan plus prednisone plus Thalomid (MPT) were the most common expected first-line regimens (29% and 16%, respectively) (Figure 3).
- In the second-line setting (after onset of RRMM), the most common expected regimen for patients who received SCT was, by far, Revlimid plus dexamethasone (RD) (33%), with the next most common regimen being VELCADE plus dexamethasone (VD) (15%) (Figure 4).
- Similar results on expected second-line treatments were obtained when the physicians were asked to consider patients with RRMM who had not previously undergone SCT (Figure 4).

Overall Therapy Duration

- For SCT-eligible patients, 70% of physicians believed that overall first-line therapy duration is between 3 and 4 months (Table 2).
- For SCT-ineligible patients, 51% of physicians believed that typical first-line therapy is > 6 months, and 33% of physicians believed it is between 5 and 6 months.
- More than half of all physician respondents believed that typical second-line therapy duration is less than 6 months.
- Disease progression was the most common reason cited by for first-line therapy discontinuation: 49% and 52% for induction/first-line therapy in SCT eligible and ineligible patients, respectively; toxicities were the second most cited reason for first-line discontinuation (30% and 28% of SCT eligible and ineligible patients, respectively).
- Disease progression was the predominant reason for second-line/subsequent-line therapy discontinuation (74% and 79% of SCT and non-SCT treated patients, respectively).

Figure 1. Risk Classification of Newly Diagnosed MM Cases



Physicians were asked to use the following risk definitions from Chng et al.[4]
- High risk: International Staging System (ISS) stage II/III and t(4;14) or 17p13 del.
- Low risk: ISS stage I/II and absence of t(4;14), 17p13 del, and +1q21 and age < 55 years.
- Standard risk: All others not classified as high risk or low risk.

Figure 2. Physician Opinion on Median Survival of Patients With MM Postrelapse

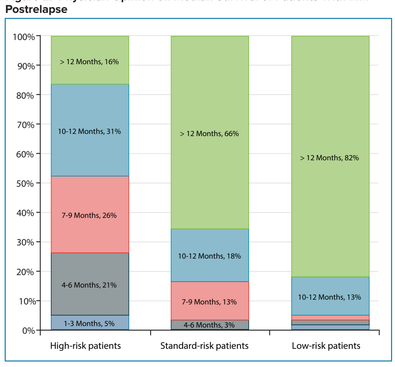


Figure 3. Physician Opinion on Induction/First-Line Therapy Choice

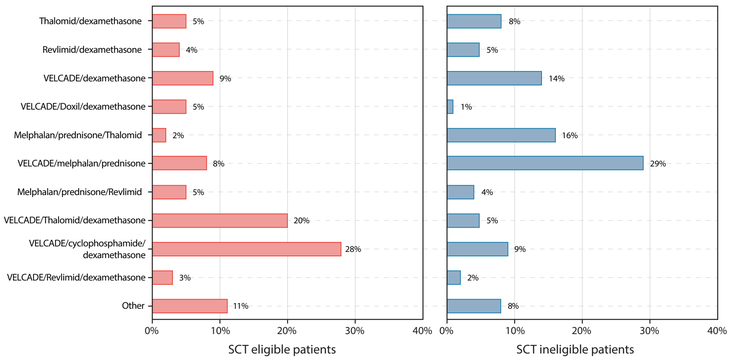


Figure 4. Physician Opinion on Second-/Subsequent-Line Therapy Choice

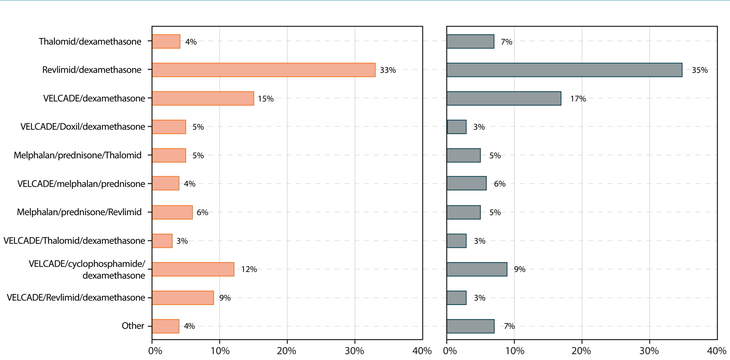


Table 2. Physician Opinion on Overall Therapy Duration

Induction/First-Line, SCT Eligible	n	%
All physicians	**61**	**100.0**
Opinion on typical duration		
< 1 month	0	0.0
1-2 months	4	6.6
3-4 months	43	70.5
5-6 months	12	19.6
> 6 months	2	3.3

Induction/First-Line, SCT Ineligible	n	%
All physicians	**61**	**100.0**
Opinion on typical duration		
< 1 month	0	0.0
1-2 months	1	1.6
3-4 months	9	14.8
5-6 months	20	32.8
> 6 months	31	50.8

Second-Line/Subsequent-Line, Patients Who Received SCT	n	%
All physicians	**61**	**100.0**
Opinion on typical duration		
< 1 month	0	0.0
1-2 months	1	1.6
3-4 months	12	19.7
5-6 months	22	36.1
> 6 months	26	42.6

Second-Line/Subsequent-Line, Patients Who Have Not Received SCT	n	%
All physicians	**61**	**100.0**
Opinion on typical duration		
< 1 month	0	0.0
1-2 months	2	3.3
3-4 months	12	19.7
5-6 months	19	31.1
> 6 months	28	45.9

LIMITATIONS

- This study was based on a small sample size, and therefore the surveyed physicians may not be representative of the general population of RRMM providers with regard to medical specialty, geography, experience, and other factors.
- The small sample size also prevented formal statistical testing of between-country differences in the survey results; however, descriptive comparisons of these country-level differences will be presented in a future phase of study reporting.

CONCLUSIONS

- In the physician sample surveyed, an average of 21% of new patients with MM were believed to be high-risk, which aligns with previous literature (e.g., Kumar et al.[5]) on these patients.
- VELCADE-based regimens are the predominant choice of first-line MM treatment.
- VELCADE is also frequently chosen in second-line (post-RRMM onset), but Revlimid-based regimens are the most common in this setting.
- Survival prospects for patients with RRMM remain limited, particularly for high-risk patients, and second-line therapy is typically of short duration (≤ 6 months).
- Patient-level studies are needed to characterize unmet medical needs (e.g., early therapy discontinuation due to progression or toxicities) suggested in our findings for European patients with RRMM.

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REFERENCES

Please see handout for complete reference list.

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