

# Assessment of Real-World Treatment Patterns and Outcomes in Relapsed or Refractory Multiple Myeloma: Evidence From a Brief Multicountry Survey of European Physicians

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## INTRODUCTION

- Despite treatment advancements leading to improved clinical responses and overall survival, nearly all patients with multiple myeloma (MM) eventually relapse and die from disease progression.<sup>1</sup>
- Few data describing treatment patterns and survival of patients with MM in the relapsed/refractory setting are available from real-world clinical settings in Europe; data on physicians' perceptions of typical treatment patterns are also limited and may provide important insights into regional differences in routine practice.

## METHODS

- A cross-sectional survey of 61 physicians treating relapsed/refractory MM (RRMM) in France (n = 21), Germany (n = 20), and the United Kingdom (UK) (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/induction therapy).
- Analyses were descriptive and exploratory.

## RESULTS

### Physician Characteristics

- In France and the UK, the majority specialty was hematology (62% and 60% of physicians, respectively) (Table 1).
- In Germany, dual oncology/haematology ("onco-haematology") was, by far, the most common specialty reported (80% of physicians).

Table 1. Physician Characteristics

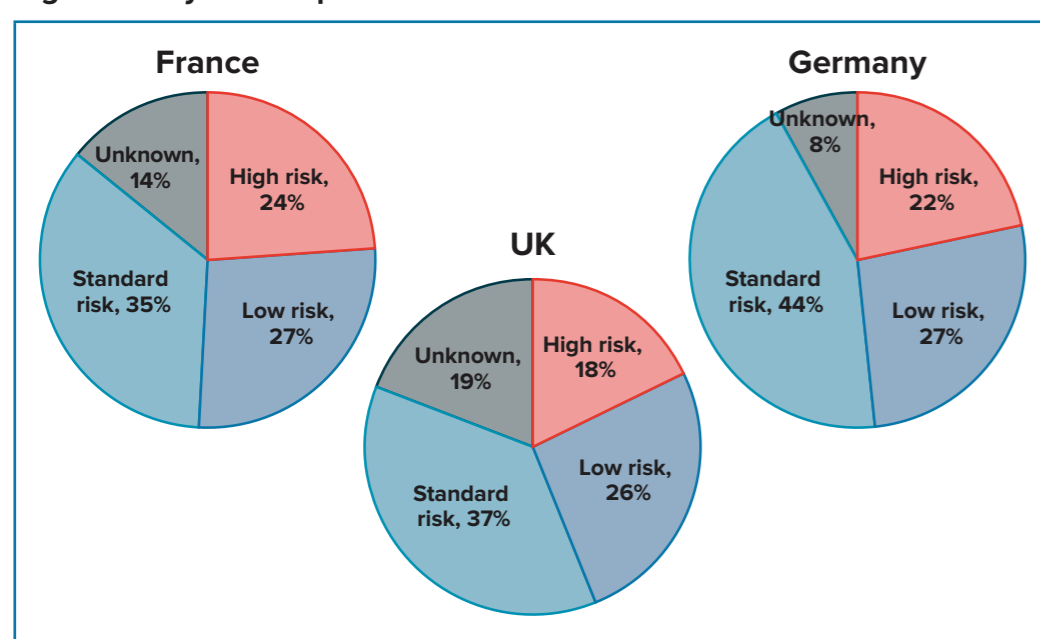
	France		Germany		UK	
	n	%	n	%	n	%
All physicians	21	100.0	20	100.0	20	100.0
Specialty						
Hematology	13	61.9	2	10.0	12	60.0
Onco-haematology	7	33.3	16	80.0	8	40.0
Medical oncology	1	4.8	2	10.0	—	—
Practice setting						
Academic/teaching hospital	10	47.6	11	55.0	15	75.00
Nonteaching hospital	10	47.6	1	5.0	4	20.00
Free-standing oncology clinic	—	—	1	5.0	—	—
Cancer center	1	4.8	2	10.0	1	5.00
No response	—	—	5	25.0	—	—
Mean (SD) past-year MM caseload	60.0 (38.0)		36 (20.0)		65 (35.0)	

SD = standard deviation.

### Risk Classification of New MM Cases

- Physicians' perceptions of the risk distribution of new MM cases was similar for each country, with high-risk patients believed to represent from 18% to 24% of new MM cases (Figure 1).

Figure 1. Physician Opinion on Risk Distribution of New MM Cases

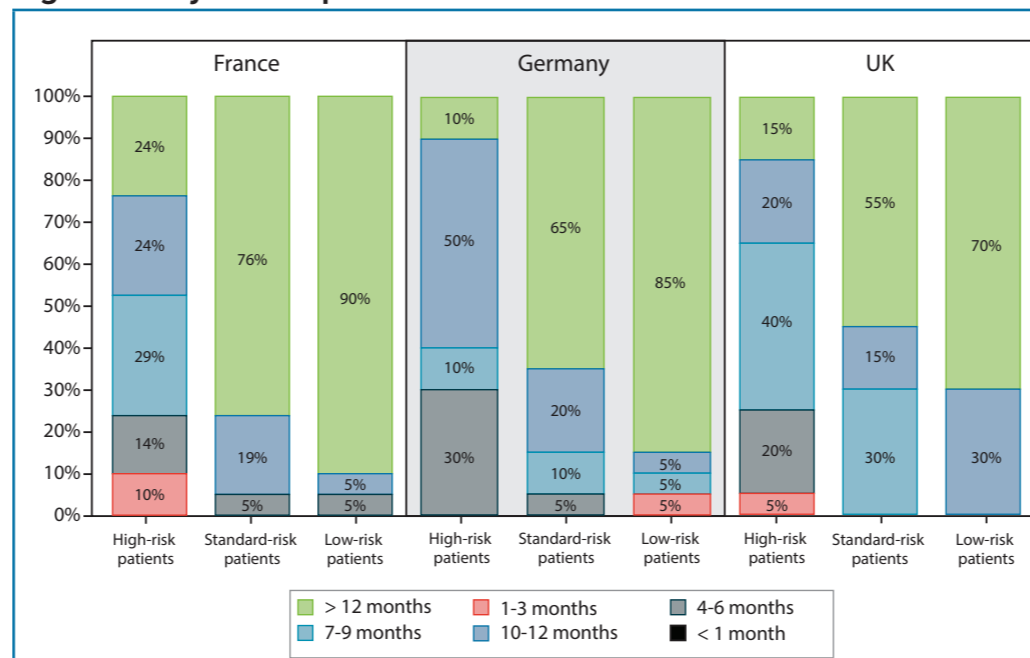


High risk: International Staging System (ISS) II/III, and t(4;14) or del(17p13); low risk: ISS I/II, and absence of t(4;14) and del(17p13) and +1q21, and age < 55 years; standard risk: all others not assigned as high risk or low risk.

### Median Survival

- In all countries, the proportion of physicians who believed median survival to be > 12 months was lowest for high-risk patients and highest for low-risk patients (Figure 2).

Figure 2. Physician Opinion on Median Survival



### First- and Second-Line Treatment Choices

- Physicians reported that Velcade is a mainstay component of induction therapy for stem-cell transplant (SCT)-eligible patients, but specific regimen choices can vary by country (Figure 3).
- For SCT-ineligible patients in all three countries, melphalan-containing regimens were the predominant expectation of physicians for induction therapy.
- In the relapse setting (i.e., second-/later-line therapy), the most common regimen expected for patients in France and Germany who received an SCT was, by far, Revlimid plus dexamethasone (RD); in the UK, RD was expected to be used less, with Velcade-based regimens reported as the most common choice (Figure 4).

### Second-/Later-Line Therapy Duration

- In Germany and the UK, a majority of physicians believed that typical overall treatment duration in the relapse (second-/later-line) setting, regardless of SCT eligibility, is ≤ 6 months (Table 2).
- In France, a somewhat lower, but still substantial, proportion of physicians held this opinion regarding overall second-/later-line therapy duration.

Table 2. Physician Opinion on Second-/Later-Line Therapy Duration

	France (n = 21)		Germany (n = 20)		UK (n = 20)	
	n	%	n	%	n	%
Patients who received prior SCT, months						
< 1	—	—	—	—	—	—
1-2	1	4.76	—	—	—	—
3-4	1	4.76	4	20.00	7	35.00
5-6	6	28.57	8	40.00	8	40.00
> 6	13	61.90	8	40.00	5	25.00
Patients who did not receive prior SCT, months						
< 1	—	—	—	—	—	—
1-2	2	9.52	—	—	—	—
3-4	1	4.76	5	25.00	6	30.00
5-6	6	28.57	7	35.00	6	30.00
> 6	12	57.14	8	40.00	8	40.00

## 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.
- The small sample size also prevented formal statistical testing of between-country differences in the survey results.
- Additional information (such as the reasons physicians believed certain regimens will be chosen over others) that may have provided additional context to the study findings could not be collected within the limited scope of the survey.

## REFERENCES

- Harvey RD. Clin Pharmacol. 2014;6:87-96.
- Kumar S, Fonseca R, Ketterling RP, Dispenzieri A, Lacy MQ, Gertz MA, et al. Blood. 2012;119(9):2100-5.

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

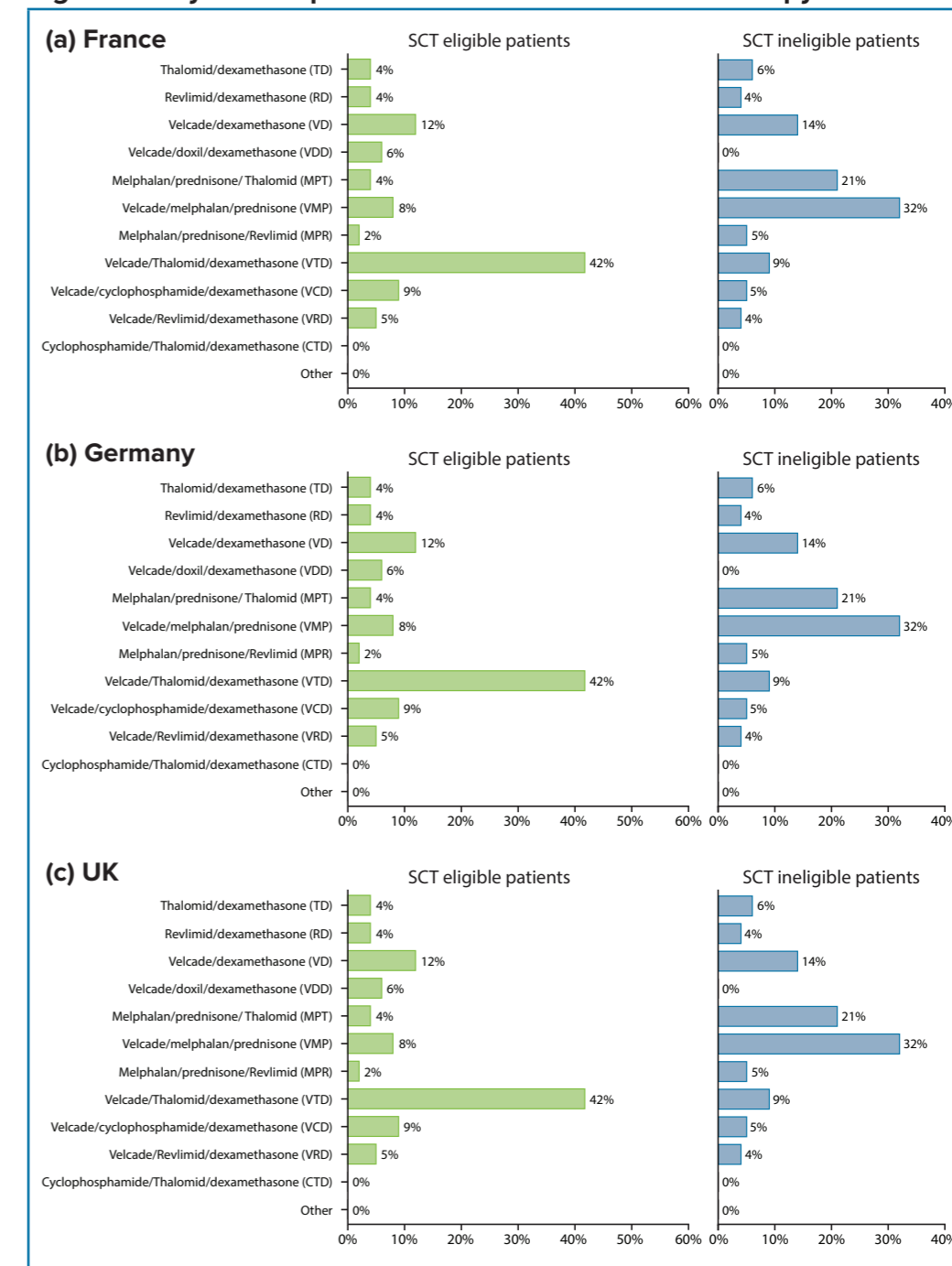
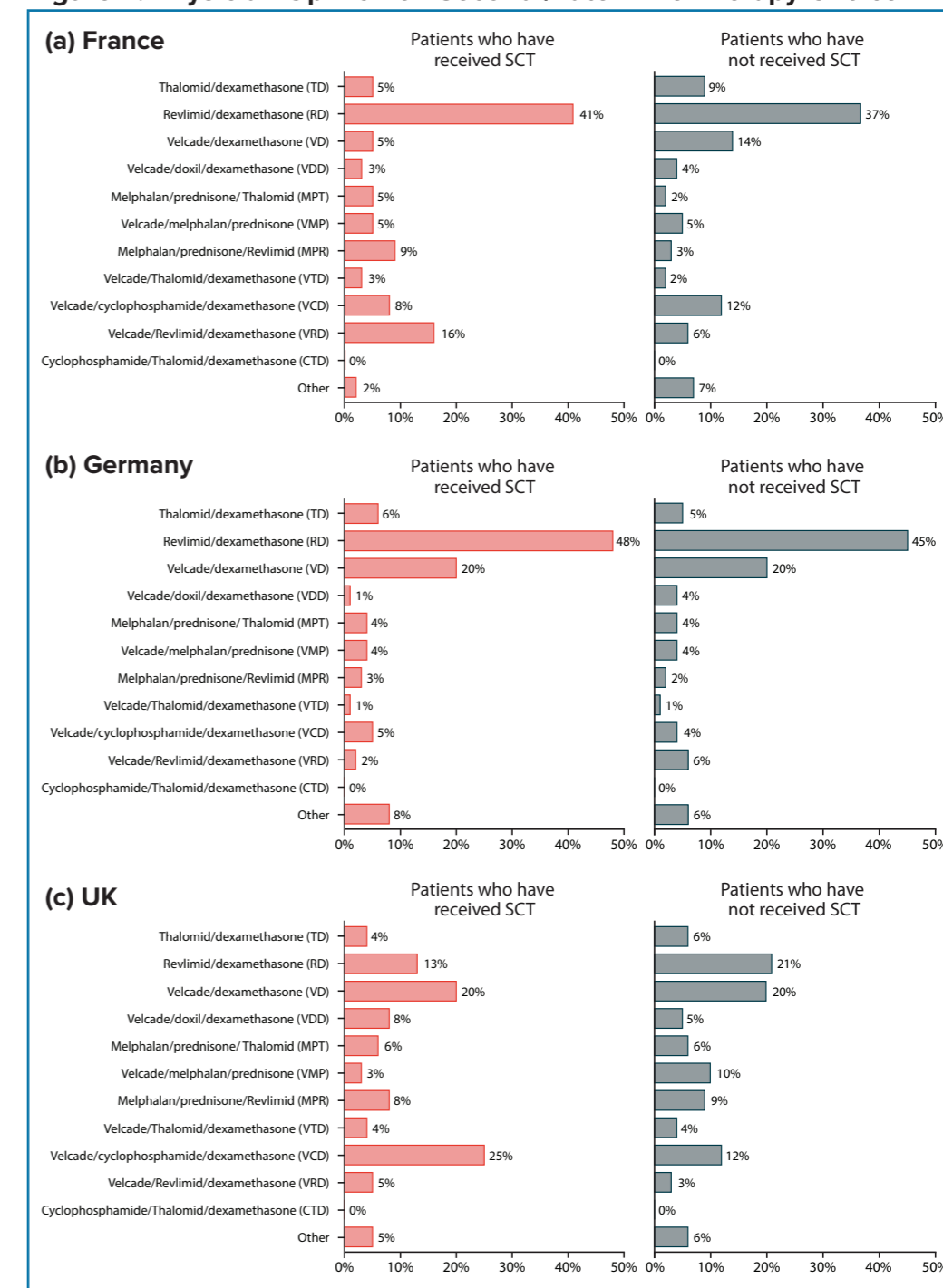


Figure 4. Physician Opinion on Second-/Later-Line Therapy Choice



## CONCLUSIONS

- In the combined physician sample surveyed, an average of 21% of new patients with MM were believed to be high risk (with little variation by country), which aligns with previous literature (e.g., Kumar et al.<sup>2</sup>)
- RD or various Velcade-based regimens were the predominant choice physicians expected for second-/later-line treatment, but specific regimen compositions expected by the physicians varied substantially across countries.
- Survival prospects for patients with RRMM remain limited, particularly for high-risk patients, and second-line therapy is typically of short duration (≤ 6 months), based on the opinions of the physicians surveyed.