These new therapies were designed to improve patient outcomes by targeting specific mechanisms that drive the growth and survival of myeloma cells. They have shown promise in clinical trials, leading to the expectation that they will be incorporated into standard treatment regimens.

**Background**

The refractory/relapsed multiple myeloma (RRMM) treatment landscape has increased in complexity in recent years due to the availability of novel agents. However, the effectiveness of these agents in real-world clinical practice in Germany and the impact of novel agents on patient outcomes are not well understood.

**Objectives and Analyses**

- **Patient Characteristics**: Objective outcomes included disease and patient characteristics measured at the time of the latest treatment line, recent treatment, and overall treatment duration.
- **Treatment Distribution**: Treatment patterns were described until the censor date (December 31, 2018). Data were analyzed overall, by treatment line, and by treatment duration.
- **Conclusions**: Overall, D or E triplet and KR triplet regimens were associated with the longest treatment durations compared with the other regimens. Antibody-based triplet regimens and K-based triplet and non-triplet regimens were associated with the most prolonged treatment durations. There have already been advances in the RRMM treatment landscape; notably, 48% of those included in this analysis were >75 years old. Although this is older than the patients included in the trials that led to the approval of novel agents, Germany may serve as an example for the adoption of novel treatments as these data demonstrate that all agents for the treatment of RRMM approved since 2015 have been implemented in clinical practice.

**Results**

- **Overall, 2L triplet and 3L non-triplet regimens were associated with the longest treatment durations compared with the other regimens.**
- **Overall, 48% of those included in this analysis were >75 years old.**
- **Overall, D or E triplet and KR triplet regimens were associated with the longest treatment durations compared with the other regimens. Antibody-based triplet regimens and K-based triplet and non-triplet regimens were associated with the most prolonged treatment durations.**

**Discussion**

- **Overall, 48% of patients received ≥5 lines of treatment.**
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**References**


**Acknowledgments**

- The authors thank the participating healthcare professionals and their patients for their participation in this study.
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**Limitations**

- **Multiple approaches of novel agents for the treatment of RRMM in Europe resulted in changes in the treatment landscape.**

**Conclusions**

- **Overall, 48% of patients received ≥5 lines of treatment.**
- **Overall, 2L triplet and 3L non-triplet regimens were associated with the longest treatment durations compared with the other regimens.**

**Figure 1. Distribution of 2L and 3L Regimens in Patients with Relapsed/Refractory MM**

- **Results**: Overall, D or E triplet and KR triplet regimens were associated with the longest treatment durations compared with the other regimens. Antibody-based triplet regimens and K-based triplet and non-triplet regimens were associated with the most prolonged treatment durations.

**Figure 2. Prior Treatment Regimens for Patients with Relapsed/Refractory MM Currently Receiving 2L or 3L Treatment**

- **Results**: Overall, D or E triplet and KR triplet regimens were associated with the longest treatment durations compared with the other regimens. Antibody-based triplet regimens and K-based triplet and non-triplet regimens were associated with the most prolonged treatment durations.

**Figure 3. Sequence of Treatments Prior to 2L in A) 2016, B) 2017, and C) 2018, and D) Sequence of Treatments Prior to 3L in 2018**

- **Results**: Overall, D or E triplet and KR triplet regimens were associated with the longest treatment durations compared with the other regimens. Antibody-based triplet regimens and K-based triplet and non-triplet regimens were associated with the most prolonged treatment durations.