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The 11th World Congress on CONTROVERSIES IN MULTIPLE MYELOMA

EUROPEAN CLINICAL VIEWS ON THE CHALLENGES OF TREATING PATIENTS WITH AUTOLOGOUS CHIMERIC ANTIGEN RECEPTOR T-CELL THERAPY IN MULTIPLE MYELOMA

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INTRODUCTION

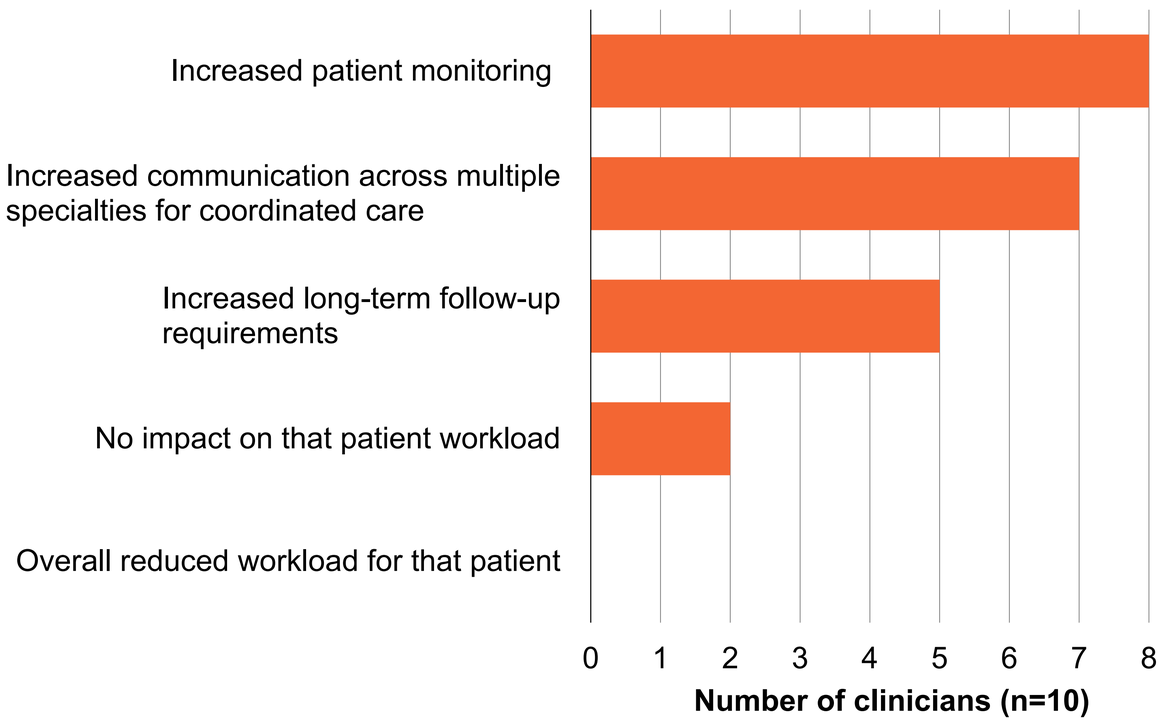
- Autologous chimeric antigen receptor T-cell (CAR-T) therapies constitute a promising approach for the treatment of multiple myeloma (MM)[1–3]
- Limited information exists on how the logistical and practical issues associated with CAR-T prescription and administration for patients with MM affect treatment choices of clinicians in Europe
- This study aimed to explore clinicians' experiences and perceptions of the use of CAR-T for the treatment of MM in Europe
- We conducted a targeted review of recent literature, collected internal teams' insights and developed an online survey to explore the qualitative and semi-quantitative attributes of clinicians prescribing CAR-T therapy as well as related management practices
- Survey questions were developed to prevent bias, and responses were structured to provide a comprehensive understanding of current practices and perceptions

RESULTS

- Survey responses were received from 10 clinicians across five countries who had prescribed CAR-T therapy to 135 patients in the last 12 months, out of which 119 patients (88%) received CAR-T infusion after initial prescription
- CAR-T therapy was perceived as a positive treatment choice, with the most common reason for prescribing being clinical efficacy data such as longer progression-free survival/overall survival without maintenance therapy
  - Most (80%) surveyed clinicians tailored treatment selection to ensure patients were specifically eligible for CAR-T therapy in future treatment lines
- Clinicians reported increased workload burden following CAR-T prescription compared with prescribing standard of care (**Figure 1**)
  - A patient prescribed CAR-T therapy reportedly consumed ~37% (range: 10–85%) of clinicians' total caseload in the period before CAR-T infusion, with required time for treatment planning increasing from 1–2 hours for other treatments to 8–9 hours with CAR-T therapy
- On average, the time between CAR-T infusion prescription and administration was 62 days (range: 16–161 days)
  - The average perceived time from prescription to dropout was 26.5 days; ~9% (range: 0–20%) of patients dropped out before receiving CAR-T therapy
  - The most common reasons for failure to receive CAR-T infusion were general decline/increase in frailty and disease progression
- Based on responses from all clinicians, an estimated 9% (range: 0–20%) of patients prescribed CAR-T therapy died prior to CAR-T infusion
- More than half (60%) of clinicians prescribed prophylactic therapies prior to CAR-T therapy
- While most clinicians (90%) used bridging therapy, no standard therapy emerged for bridging therapy and some clinicians reported use of bispecific antibodies (**Table 1**)

Figure 1

Impact of CAR-T therapy on workload prior to infusion compared with SOC therapy



CAR-T, chimeric antigen receptor T-cell; SOC, standard of care

Table 1

Bridging therapies prescribed prior to CAR-T therapy

Bridging Therapy	Number of responses (n=9)†
Talquetamab	3
DKd	2
Selinexor based combination regimens	2
EloPd	2
Radiotherapy	1
DP–PACE	1
VCD	1
Polituzumab	1
Steroids	1
Rituximab	1
K	1
Venetoclax–Bortezomib	1
VAD	1
Kd	1
Bispecific antibody therapy	1
K-based combination regimens	1
P-based combination regimens	1

CAR-T, chimeric antigen receptor T-cell; D, daratumumab; d, dexamethasone; Elo, elituzumab; K, carfilzomib; PACE, cisplatin–doxorubicin–cyclophosphamide–etoposide; VAD, vincristine–doxorubicin–dexamethasone; VCD, vincristine–cyclophosphamide–dexamethasone

†Respondents could select multiple responses.

CONCLUSION

- While clinicians in Europe view CAR-T therapy as a highly effective treatment option for MM, the substantial workload and time commitment required for planning and preparation, particularly in the absence of multidisciplinary team support, pose considerable challenges
- Patient attrition between prescription and administration of CAR-T therapy represents a critical health risk and opportunity cost for patients
- The proportion of patients who died prior to CAR-T therapy reported by clinicians is consistent with clinical trial and real-world CAR-T data[4–6]
- Although the clinician sample size was small, they had collectively treated 135 patients with CAR-T therapy
- These findings underscore challenges for clinicians coupled with the risk of disease progression or death for patients due to the inherent pre-treatment delays associated with CAR-T therapy

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