Introduction

- Carfilzomib is a selective next-generation proteasome inhibitor of the immunoproteasome and is approved in the United States and Europe for the treatment of relapsed and refractory multiple myeloma.

- Several studies have explored the role of carfilzomib in the treatment of multiple myeloma, with a focus on its safety profile and efficacy in different dose schedules.

Methods

- Patients were treated in a phase 1b/2 study of prolonged infusion carfilzomib in patients with relapsed and/or refractory multiple myeloma.

- The study included 28 patients with a median age of 63 (range: 47–81) years, and 18 (64%) were ≥65 years.

- Patients were treated with carfilzomib in a 30-minute IV infusion over 3 to 6 cycles, with a median of 3 cycles.

- The study was designed to determine the optimal dose regimen and to assess the safety and efficacy of carfilzomib in this patient population.

Results

- Overall response rate (ORR) was 54% (95% CI: 36%–72%) for all dose groups.

- Median progression-free survival (PFS) was 10 months (95% CI: 6–19 months).

- The 60% ORR attained with the 20/56 mg/m² dose group suggests that higher dosing may lead to higher efficacy with an acceptable safety profile.

Conclusions

- Prolonged infusion carfilzomib administered as a 30-minute IV infusion is well tolerated in this heavily pretreated patient population, with a median time to progression of 10 months.

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