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INTRODUCTION

Despite many recent advances, relapsed or refractory multiple myeloma (RRMM) remains incurable[1] and innovative treatments are still needed. G protein-coupled receptor, class C, group 5, member D (GPRC5D) is an emerging target for the treatment of MM[2]. CT071 is a fully human GPRC5D-targeting autologous second-generation CAR T-cell product manufactured using a CARcelerate™ platform which expedites the manufacturing process to approximately 30 hours resulting in much shorter vein-to-vein time and younger, healthier T cells.

AIM

In this first-in-human, single-arm, open-label exploratory clinical trial, we evaluated the safety and preliminary efficacy of CT071 in patients with RRMM (NCT05838131).

METHODS

Patients with RRMM with an ECOG score 0-
3 prior lines including a proteasome inhibitor (PI) and an immunomodulatory drug (IMID) or 1 prior line of therapy with prior relapse, lack of response or lack of tolerability to a PI and an IMID were enrolled. CT071 was administered as a single infusion at doses of 1.0 10^5 or 3.0 10^5 CAR-positive (CAR+) T cells/kg using i3+3 design for dose-escalation and dose-expansion.

CONCLUSIONS

In the ongoing exploratory trial, preliminary data from CT071, an autologous fully human anti-GPRC5D CAR T-cell product with expedited manufacturing, demonstrate an acceptable safety profile and encouraging clinical efficacy in patients with RRMM without the need for bridging therapy, and warrants further clinical evaluation.

REFERENCE

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[2] Mailankody S, et al. *N Engl J Med.* 2022;387(13):1196-1206.

RESULTS

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