

## **CILTACABTAGENE AUTOLEUCEL (CILTA-CEL) VERSUS PHYSICIAN'S CHOICE OF TREATMENT (PCT): A META-ANALYSIS IN PATIENTS WITH RELAPSED OR REFRACTORY MULTIPLE MYELOMA (RRMM)**

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**Introduction:** Cilta-cel is a novel chimeric antigen receptor T-cell therapy that is being evaluated in the CARTITUDE-1 trial (NCT03548207) in patients with RRMM who are triple-class exposed (to immunomodulatory drugs, proteasome inhibitors, and an anti-CD38 monoclonal antibody). As there is no clear standard of care for this patient population, and due to an absence of direct head-to-head trials evaluating cilta-cel and other relevant treatments, indirect treatment comparisons (ITCs) between cilta-cel and treatments used in current clinical practice, ie, PCT, have been previously conducted.

**Material and Methods:** In this meta-analysis, ITCs examining the comparative effectiveness of cilta-cel versus PCT on overall survival (OS) and progression-free survival (PFS) were included. Data on cilta-cel corresponded to the February 2021 data-cut for CARTITUDE-1. Data on PCT was leveraged from (i) the Flatiron database (US community-based MM registry), (ii) the results of three global RRMM daratumumab trials (POLLUX [NCT02076009], CASTOR [NCT02136134], and EQUULEUS [NCT01998971]), (iii) the US-based retrospective MAMMOTH study, and (iv) a representative German patient registry maintained by OncologyInformationService. The meta-analyses used a robust variance estimator to account for the use of CARTITUDE-1 in each pairwise ITC. The main meta-analyses considered all participants treated with cilta-cel in CARTITUDE-1 compared with PCT. Sensitivity analyses considered ITC effect estimates based on all enrolled participants in CARTITUDE-1.

**Results:** Based on data availability, the main meta-analyses included four ITCs for OS and three ITCs for PFS. Cilta-cel was associated with a statistically significant improvement in OS (HR: 0.21, 95% CI: 0.13 to 0.34) and PFS (HR: 0.20, 95% CI: 0.07 to 0.63) compared to PCT. Sensitivity analyses including all enrolled participants confirmed the results of the main meta-analyses.

**Conclusions:** In the meta-analyses, cilta-cel demonstrated a significant advantage over PCT in terms of OS and PFS, highlighting its potential as an effective therapy in patients with triple-class exposed RRMM.