3. RELAPSED/REFRACTORY MULTIPLE MYELOMA

INITIAL EXPERIENCE WITH IDECABTAGENE VICLEUCEL IN PATIENTS WITH REFRACTORY MULTIPLE MYELOMA: CASE SERIES IN A TERTIARY CARE HOSPITAL

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https://doi.org/10.3324/haematol.2026.s2.14049

Background. Idecabtagene vicleucel (ide-cel, Abecma) is the first anti-BCMA CAR-T approved for refractory multiple myeloma (MM). Although pivotal trials have demonstrated its efficacy, real-world evidence is limited, especially in newly incorporated centers. We present the first experience with ide-cel in a tertiary care hospital.

Aims. To describe the characteristics, safety, and efficacy of the first patients treated with ide-cel at our center.

Methods. Retrospective descriptive study of 3 patients with refractory MM treated with ide-cel in 2024. Data collected: baseline characteristics, CAR-T process, toxicity (CRS according to ASTCT), response (IMWG criteria), and survival.

Results. Median age: 58 years (53-59). All patients were triple-class refractory (100% refractory to IMiD, PI, and anti-CD38), with a median of 3 prior lines (3-5). One patient (33%) was penta-refractory. No patient had received prior anti-BCMA therapy. Regarding safety, 100% presented with CRS, exclusively grade 1, with a median duration of 4 days (1-7). All received tocilizumab and corticosteroids with complete resolution. No ICANS or ICU admissions were recorded. Grade 3-4 neutropenia occurred in 100%, with median recovery at day 15 (14-16) in two patients. One of the 3 patients (33%) developed persistent cytopenias requiring allogeneic hematopoietic stem cell transplantation (allo-HSCT) at 8 months post-CAR-T, currently in the post-transplant recovery process without evidence of complete hematological recovery at this time. There were no severe microbiologically documented infections or treatment-related mortality. Regarding efficacy, the overall response rate was 100%, with 100% achieving complete response (CR), and 2 of them negative MRD (the 3rd patient was not evaluable due to bone marrow aplasia). Time to first response was 30 days, with continuous deepening at 3 months (100%). Complete normalization of biochemical parameters (calcium, creatinine) occurred at one month. With a median follow-up of 7 months (5-12), no patient has progressed, all remain alive and in sustained response.

Conclusions. Ide-cel demonstrated excellent efficacy (100% response, 100% CR) and a favorable safety profile (grade 1 CRS exclusively, no ICANS) in patients with triple-class refractory MM. One case required allo-HSCT at 8 months post-CAR-T due to persistent cytopenias, currently in the post-transplant recovery process. This remarks that could be important to have a back-up of CD34+ cells saved from previous auto-HSCT, to treat this complication. This first experience in a tertiary care hospital confirms the feasibility and effectiveness of ide-cel in newly incorporated centers, highlighting the importance of prolonged hematological monitoring and the need for close monitoring of bone marrow recovery.