CLINICIAN GUIDE TO CAR T-CELL THERAPY FOR MULTIPLE MYELOMA

In 2024, the indications for CAR T-cell therapy in multiple myeloma were expanded to include use in earlier lines of treatment (after 1 or more lines of therapy).^{1,2} Patients who may be eligible for CAR T-cell therapy should be referred to a CAR T-cell therapy center for evaluation as soon as possible.

MD Anderson CAR T-cell Therapy Center Contacts

MDACC Main Phone Number: 713-792-2121
Direct Line (Page Operator): 713-792-7090

Referring Provider Team: https://www.mdanderson.org/for-physicians/refer-a-patient/referring-provider-team.html

FDA-approved CAR T-cell Therapies for Multiple Myeloma (as of November 17, 2025)

	TARGET	FDA-APPROVED INDICATION
Ciltacabtagene autoleucel (cilta-cel) ³	BCMA	Treatment of adult patients with RRMM after ≥1 prior lines of therapy, including an IMiD agent and a PI, who are refractory to lenalidomide
Idecabtagene vicleucel (ide-cel) ⁴	BCMA	Treatment of adult patients with RRMM after ≥2 prior lines of therapy, including an IMiD agent, a PI, and an anti-CD38 mAb

Who to Refer for CAR T-cell Therapy

Patients who have RRMM and

- ✓ Received ≥1 prior lines of therapy, including an IMiD agent and a PI, who are refractory to lenalidomide OR ≥2 prior lines of therapy, including an IMiD agent, a PI, and an anti-CD38 mAb
- ✓ Identified disease progression but no immediate need for antimyeloma treatment

Patients with non-disease-related comorbidities (eg, cardiac, pulmonary, renal, bone marrow, or CNS-related) may qualify. Refer patients to the CAR T-cell therapy center for evaluation

Considerations for Selecting Pre–CAR T-cell Therapy (Holding Therapy)

- ✓ Avoid alkylating agents (eg, bendamustine, cyclophosphamide, melphalan)
- ✓ Avoid bispecific antibody therapy, especially BCMA-directed therapies

BCMA, B-cell maturation antigen; CAR, chimeric antigen receptor; CNS, central nervous system; CRS, cytokine release syndrome; FDA, US Food and Drug Administration; ICAHT, immune effector cell—associated hematotoxicity; ICANS, immune effector cell—associated neurotoxicity syndrome; IEC-HS, immune effector cell—associated hemophagocytic lymphohistiocytosis—like syndrome; IMiD, immunomodulatory drug; mAb, monoclonal antibody; MDACC, MD Anderson Cancer Center; PI, proteasome inhibitor; RRMM, relapsed/refractory multiple myeloma; TEAE, treatment-emergent adverse event.

1. Carvykti. FDA.gov. https://www.fda.gov/vaccines-blood-biologics/cellular-gene-therapy-products/carvykti; 2. Abecma. FDA.gov. https://www.fda.gov/vaccines-blood-biologics/abecma-idecabtagene-vicleucel; 3. Hayden P, et al. Ann Oncol. 2022;33(3):259-275; 4. Brudno JN, et al. Nat Rev Clin Oncol. 2024;21(7):501-521.

