MEDICAL COVERAGE POLICY	
SERVICE:	**Idacabtagene Vicleucel (Abecma®)**
Policy Number:	**290**
Effective Date:	**09/01/2024**
Last Review:	**06/10/2024**
Next Review:	**06/10/2025**

Important note: *Unless otherwise indicated, medical policies will apply to all lines of business. Medical necessity as defined by this policy does not ensure the benefit is covered. This medical policy does not replace existing federal or state rules and regulations for the applicable service or supply. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan documents. See the member plan specific benefit plan document for a complete description of plan benefits, exclusions, limitations, and conditions of coverage. In the event of a discrepancy, the plan document always supersedes the information in this policy.*

SERVICE: Idacabtagene Vicleucel (Abecma®)

PRIOR AUTHORIZATION: Required

POLICY: Please review the plan's EOC (Evidence of Coverage) or Summary Plan Description (SPD) for details.

For Medicare plans, please refer to Medicare NCD 110.24 Chimeric Antigen Receptor (CAR) T-cell Therapy

For Medicaid plans, please confirm coverage as outlined in the Texas Medicaid Provider Procedures Manual | TMHP (TMPPM). Texas Mandate HB154 is applicable for Medicaid plans.

BSWHP may consider idacabtagene vicleucel (Abecma®) medically necessary for the treatment of multiple myeloma when ALL of the following criteria are met:

1. The member has a diagnosis of multiple myeloma; **AND**
2. Member is ≥ 18 years old; **AND**
3. Member diagnosed by a hematologist or oncologist; **AND**
4. One-time, single administration treatment; **AND**
5. Member will be using idacabtagene vicleucel at a certified treatment center; **AND**
6. Member has an Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1; **AND**
7. Member has adequate bone marrow, renal, hepatic, and cardiac function; **AND**
8. Member has relapsed or refractory disease and received two or more prior lines of systemic therapy including:
   a. Immunomodulatory agent
   b. Proteasome inhibitor
   c. Anti-CD38 monoclonal antibody

   AND
9. Member has or will receive lymphodepleting chemotherapy (fludarabine 30 mg/m^2 IV daily and cyclophosphamide 300 mg/m^2 IV daily) for 3 days before infusion of idacabtagene vicleucel; **AND**
10. Member will NOT be treated with more than 510 x 10^6 viable CAR-T cells; **AND**
11. Member does NOT have any of the following conditions:
    a. Active infection (including hepatitis B, hepatitis C, or HIV infection)
    b. Inflammatory disorder

AND

12. The individual has NOT previously been treated with CD-19 targeted therapy or prior CD-19 targeted CAR-T cell therapy; **AND**
13. Member has been assessed by a hematologist/oncologist to be an appropriate candidate for apheresis.

BSWHP considers repeat administration of idacabtagene vicleucel experimental and investigational because the effectiveness of this strategy has not been established.

BSWHP considers idacabtagene vicleucel to be experimental and investigational for all other indications.

All requests will be reviewed by a clinical pharmacist and medical director.

BACKGROUND:

Chimeric antigen receptor (CAR) T cells and genetically engineered T-cell receptor (TCR T) cells are manufactured by collecting lymphocytes from a patient or donor and modifying them using gene transfer techniques. Viral vectors are introduced that express cell receptors that are highly specific for tumor antigens. CAR T and TCR T cells are then infused back into the patient where they direct a targeted immune response to cancerous tissue. CAR T cells express a hybrid receptor with an extracellular single-chain antibody fragment, a transmembrane domain, and at least 1 intracellular signaling domain. CAR T cells are most often used to treat hematological malignancies, and a common target is B-cell cluster of differentiation antigen 19 (CD19).

Multiple myeloma (MM) is a rare hematologic cancer arising from plasma cells in the bone marrow. Malignant plasma cells produce abnormal monoclonal paraproteins that cause organ damage. According to the American Cancer Society (ACS), an estimated 34,920 new cases of MM will be diagnosed, and 12,410 people will die from the disease in the U.S. in 2021. The median age at diagnosis is 69 years, and almost all cases of MM (95%) are diagnosed after the cancer has metastasized. The treatment landscape for MM has evolved over the past 15 years, delivering many new options for improved management of the disease. Despite these advances, MM remains incurable. Almost all patients eventually relapse and develop relapsed/refractory MM (RRMM). The overall 5-year survival rate for MM is 53.9%.

The U. S. Food and Drug Administration (FDA) granted approval for idacabtagene vicleucel (Abecma®) on March 26, 2021 which is a B-cell maturation antigen (BCMA)-directed genetically modified autologous T cell immunotherapy indicated for the treatment of adult patients with relapsed or refractory multiple myeloma after four or more prior lines of therapy, including an immunomodulatory agent, a proteasome inhibitor, and an anti-CD38 monoclonal antibody. Idacabtagene vicleucel is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) and has a boxed warning for cytokine release syndrome (CRS), neurologic toxicities, hemophagocytic

lymphohistiocytosis/macrophage activation syndrome (HLH/MAS), prolonged cytopenia, and T-cell malignancies.

The FDA approval of idacabtagene vicleucel is based on data from the KarMMA (NCT03361748) open-label, single-arm, multicenter study in adult patients after 3 or more lines of prior therapy showing an overall response rate (ORR) of 72%, stringent complete response rate (sCR) of 28%, median progression-free survival (PFS) of 8.8 months overall, a PFS of 20.2 months among patients with a complete response (CR) or better, and a median overall survival (OS) of 19.4 months out of 100 evaluable patients.

In KarMMa-3 (NCT03651128), an open-label, multicenter, randomized control trial, adult patients with relapsed and refractory multiple myeloma who had received two to four prior lines of therapy showed an ORR of 71%, sCR 39%, and median PFS was 13.3 months overall which was significantly higher than 4.4 months for standard-regimen group.

With respect to safety, a higher proportion of the idacabtagene arm died within the first 9 months of randomization in the KarMMA-3 trial compared to standard regimen. However, the OS curves in the Kaplan-Meier Plot cross at month 15 of the study rendering the overall hazard ratio unreliable to estimate the treatment effect on OS. The most common grade 3 or higher adverse effects were febrile neutropenia and infections. Serious adverse reactions occurred in 67% of patients in the KarMMA study and 43% of patients in the KarMMA-3 trial.

CODES:

Important note: *Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.*

CPT Codes:	0540T - Chimeric antigen receptor T cell (CAR-T) therapy; CAR-T cell administration, autologous 96409 - Chemotherapy administration; intravenous, push technique, single or initial substance/drug 96413 - Chemotherapy administration; intravenous infusion technique; up to 1 hour, single or initial substance/drug
HCPCS Codes:	Q2055: Idecabtagene vicleucel, up to 460 million autologous b-cell maturation antigen (bcma) directed car-positive t cells, including leukapheresis and dose preparation procedures, per therapeutic dose
ICD10 codes:	C90.00 Multiple myeloma not having achieved remission C90.01 Multiple myeloma in relapse Z51.12 Encounter for antineoplastic immunotherapy
ICD10 Not covered:	

POLICY HISTORY:

Status	Date	Action

New	04/22/2021	New policy
Updated	05/27/2021	Removed Oncology Analytics line, added apheresis criteria
Updated	07/22/2021	Added clinician reviewer criteria
Updated	06/23/2022	Added NCD information
Updated	10/27/2022	Removed language with CMS LCD since NCD applies. Updated HCPCS code. Removed Texas Mandate HB1584 language from main policy section as the policy is compliant. Minor formatting update.
Reviewed	10/09/2023	Applied new layout and format.
Updated	06/10/2024	Updated criteria for 3rd line therapy, max dose, and background

REFERENCES:

The following scientific references were utilized in the formulation of this medical policy. BSWHP will continue to review clinical evidence related to this policy and make modifications based upon the evolution of the published clinical evidence. Should additional scientific studies become available, and they are not included in the list, please forward the reference(s) to BSWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.

1. Abecma (idecabtagene vicleucel) [prescribing information]. Summit, NJ: Celgene Corporation; April 2024.
2. Almåsbak H, Aarvak T, Vemuri MC. CAR T cell therapy: a game changer in cancer treatment. J Immunol Res. 2016;2016:5474602.
3. American Cancer Society. Key Statistics About Multiple Myeloma. Available at: https://www.cancer.org/cancer/multiple-myeloma/about/key-statistics.html. Accessed April 16, 2021.
4. Brentjens RJ. Are chimeric antigen receptor T cells ready for prime time? Clin Adv Hematol Oncol. 2016;14(1):17-19.
5. Children's Hospital of Philadelphia (CHOP). What to Expect: CAR T-cell Therapy Process. 2017. Available at: http://www.chop.edu/centers-programs/cancer-immunotherapy-program/your-experience. Accessed August 8, 2017.
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14. NIH National Cancer Institute. Cancer Stat Facts: Myeloma. Available at: https://seer.cancer.gov/statfacts/html/mulmy.html. Accessed April 16, 2021.
15. Rodriguez-Otero, Paula et al. “Ide-cel or Standard Regimens in Relapsed and Refractory Multiple Myeloma.” The New England journal of medicine vol. 388,11 (2023): 1002-1014. doi:10.1056/NEJMoa2213614
16. Ye B, Stary CM, Gao Q, et al. Genetically modified T-cell-based adoptive immunotherapy in hematological malignancies. J Immunol Res. 2017;2017:5210459.

***Note**:*
Health Maintenance Organization (HMO) products are offered through Scott and White Health Plan dba Baylor Scott & White Health Plan, and Scott & White Care Plans dba Baylor Scott & White Care Plan. Insured PPO and EPO products are offered through Baylor Scott & White Insurance Company. Scott and White Health Plan dba Baylor Scott & White Health Plan serves as a third-party administrator for self-funded employer-sponsored plans. Baylor Scott & White Care Plan and Baylor Scott & White Insurance Company are wholly owned subsidiaries of Scott and White Health Plan. These companies are referred to collectively in this document as Baylor Scott & White Health Plan.

RightCare STAR Medicaid plans are offered through Scott and White Health Plan in the Central Managed Care Service Area (MRSA) and STAR and CHIP plans are offered through SHA LLC dba FirstCare Health Plans (FirstCare) in the Lubbock and West MRSAs.