BOSTON MEDICAL CENTER HEALTHNet PLAN

bmchp.org | 888-566-0008

WELL SENSE HEALTH PLAN

wellsense.org | 877-957-1300

Medical Policy

CAR T-Cell Therapy to Treat Hematological Malignancies

Policy Number: OCA 3.22
Version Number: 10
Version Effective Date: 01/01/22

Product Applicability	☒ **All Plan[+] Products**
WellSense Health Plan ☒ NH Medicaid ☒ NH Medicare Advantage	**Boston Medical Center HealthNet Plan** ☒ MassHealth ☒ Qualified Health Plans/ConnectorCare/Employer Choice Direct ☒ Senior Care Options

[+] Note: Disclaimer and audit information is located at the end of this document.

Policy Summary

Autologous immunotherapy with antigen-specific chimeric antigen receptor T-cell therapy (CAR T-cell therapy) is considered medically necessary to treat B-cell hematological malignancies when all applicable Plan clinical review criteria are met and the treatment is approved by the U.S. Food & Drug Administration (FDA). The clinical regimen must be consistent with National Comprehensive Cancer Network (NCCN) guidance for the treatment and applicable guidelines established by the FDA in effect on the date of infusion.

Prior authorization with Plan Medical Director review and approval is required for every request for CAR T-Cell therapy, including but not limited to the intravenous infusion of ABECMA® (idecabtagene vicleucel), BREYANZI® (lisocabtagene maraleucel), KYMRIAH® (tisagenlecleucel), TECARTUS™ (brexucabtagene autoleucel), and YESCARTA® (axicabtagene ciloleucel)**, for any indication** (including those indications considered medically necessary in the Clinical Criteria section) due to the risk of severe cytokine release syndrome, neurotoxicity, and the potential for other life-threatening complications of CAR T-cell therapy.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Prior authorization requests for types of immunotherapy NOT specified in the Clinical Criteria section (including other indications and/or agents for CAR T-cell therapy) will be evaluated for medical necessity using the Plan's *Medically Necessary* medical policy or the *Experimental and Investigational Treatment* medical policy. A Plan Medical Director will evaluate the requested treatment, with individual consideration based on the member's clinical condition and past medical history. Refer to the Plan's *Medically Necessary* medical policy, policy number OCA 3.14, for the product-specific definitions of medically necessary treatment. See the Plan's *Experimental and Investigational Treatment* medical policy, policy number OCA 3.12, for the product-specific definitions of experimental or investigational treatment. Review the Plan's *Genetic/Genomic Testing and Pharmacogenetics* medical policy, policy number OCA 3.727, rather than this policy for genetic testing to identify the member's risk-associated genetic alterations, confirm a diagnosis, estimate treatment response, whole exome sequencing, and/or whole genome sequencing. Review the Plan's *Clinical Trials* medical policy, policy number OCA 3.192, and the applicable reimbursement policy for payment guidelines related to clinical trials: *Clinical Trials* reimbursement policy, policy number 4.134, for services provided to BMC HealthNet Plan members; *Clinical Trials* reimbursement policy, policy number SCO 4.134, for services provided to Senior Care Options members; and *Clinical Trials* reimbursement policy, policy number WS 4.12, for services rendered to WellSense Health Plan members.

Clinical Criteria

At the time of the Plan's most recent policy review, BREYANZI®/lisocabtagene maraleucel, KYMRIAH®/tisagenlecleucel, TECARTUS™/brexucabtagene autoleucel, and YESCARTA®/axicabtagene ciloleucel are listed on the MassHealth Acute Hospital Carve-Out Drugs List and are subject to additional MassHealth monitoring and billing requirements for MassHealth members. Check the MassHealth Acute Hospital Carve-Out Drugs List on the date of the prior authorization request to determine the status of ABECMA®/idecabtagene vicleucel for the Plan's MassHealth members. Utilization Reviewers will be reaching out to providers approximately 30 calendar days after the CAR T-cell infusion date to verify clinical effectiveness and at ongoing intervals for long-term monitoring of sustained response.

The Plan considers the use of ONE (1) of the following FDA-approved CAR T-cell therapies to be medical necessity when infusion occurs in an acute care clinical setting and the clinical regimen is consistent with all applicable FDA guidelines and National Comprehensive Cancer Network (NCCN) guidance. The healthcare facility dispensing and administering the CAR T-cell therapy must be certified and comply with the CAR T-cell agent's specific **Risk Evaluation and Mitigation Strategy (REMS) program**. Applicable Plan medical necessity criteria must be met for the type of CAR T-cell therapy requested, as specified below in items 1 through 6:

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

1. **ABECMA® (Idecabtagene Vicleucel) to Treat Relapsed or Refractory Multiple Myeloma**:

   The single administration of ABECMA® (idecabtagene vicleucel) is medically necessary as second-line therapy for relapsed or refractory multiple myeloma when ALL applicable criteria are met in items a through e:

   a. Member is **18 years of age or older** on the date of the infusion and treatment is prescribed by a hematologist/oncologist; AND

   b. Member has a confirmed diagnosis of BCMA-positive multiple myeloma; AND

   c. Member has relapsed or refractory multiple myeloma after receiving at least **four (4)** prior lines of therapy that include anti-CD38 monochonol antibody, a proteasome inhibitor, and an immunomodulatory agent; stem cell therapy and maintenance therapy do NOT count as additional lines of therapy to meet this criterion; AND

   d. Member has adequate bone marrow, cardiac, pulmonary, and organ functioning with no active autoimmune disease requiring immunosuppression, and deterioration of the member's medical condition is not expected within four (4) weeks after ABECMA® intravenous infusion, as determined by the treating oncologist/hematologist and consistent with the clinical guidelines and limitations for treatment specified in the Limitations section of this policy; AND

   e. Member has NOT received prior CAR T-cell treatment; OR

2. **BREYANZI® (Lisocabtagene Maraleucel) to Treat Relapsed or Refractory Large B-Cell Lymphoma**:

   The single administration of BREYANZI® (lisocabtagene maraleucel) is medically necessary as second-line therapy for relapsed or refractory large B-cell lymphoma when ALL applicable criteria are met in items a through e:

   a. Member is **18 years of age or older** on the date of the infusion and treatment is prescribed by a hematologist/oncologist; AND

   b. Member has a confirmed diagnosis of CD19-positive large B-cell lymphoma, including ANY diagnosis listed in items (1) through (4):

      (1) Diffuse large B-cell lymphoma (DBCL) not otherwise specified, including but not limited to transformed DLBCL from indolent lymphoma; OR

      (2) High-grade B-cell lymphoma; OR

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

(3) Primary mediastinal large B-cell lymphoma; OR

(4) Follicular lymphoma grade 3B; AND

c. Member has relapsed or refractory large B-cell lymphoma after receiving at least **two (2)** prior lines of therapy that include anti-CD20 chemoimmunotherapy (anthracycline-containing chemotherapy regimen for CD20-positive disease and anti-CD20 monoclonal antibody). Treatment may or may not include therapy supported by hematopoietic stem cell transplant; AND

d. Member has adequate bone marrow, cardiac, pulmonary, and organ function with no active autoimmune disease requiring immunosuppression, and deterioration of the member's medical condition is not expected within four (4) weeks after BREYANZI intravenous infusion, as determined by the treating oncologist/hematologist and consistent with the clinical guidelines and limitations for treatment specified in the Limitations section of this policy; AND

e. Member has NOT received prior CAR T-cell treatment; OR

3. **KYMRIAH® (Tisagenlecleucel) to Treat Relapsed or Refractory B-Cell Precursor Acute Lymphoblastic Leukemia**:

The single administration of KYMRIAH® (tisagenlecleucel) is medically necessary as second-line therapy for B-cell precursor acute lymphoblastic leukemia when ALL applicable criteria are met in items a through d:

a. Member is **25 years of age or younger** on the date of the infusion and treatment is prescribed by a hematologist/oncologist; AND

b. Member has a confirmed CD19-positive B-cell precursor acute lymphoblastic leukemia that is refractory or relapsed. Refractory disease is defined as failure to achieve a complete response following induction therapy with at least **two (2)** prior lines of standard chemotherapy regimen (primary refractory) **or after one (1)** cycle of standard chemotherapy for relapsed leukemia (chemorefractory). The member's condition meets ONE (1) of the criteria in item (1) or item (2):

(1) Philadelphia chromosome-positive disease and member has failed treatment with two (2) tyrosine kinase inhibitors (TKIs) up to the maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced; OR

(2) Philadelphia chromosome-negative disease; AND

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

c. Member has adequate bone marrow, cardiac, pulmonary, and organ function and deterioration of the member's medical condition is not expected within four (4) weeks after KYMRIAH® intravenous infusion, as determined by the treating oncologist/hematologist and consistent with the clinical guidelines and limitations for treatment specified in the Limitations section of this policy; AND

d. Member has NOT received prior CAR T-cell treatment; OR

4. **KYMRIAH® (Tisagenlecleucel) to Treat Relapsed or Refractory Large B-Cell Lymphoma**:

The single administration of KYMRIAH® (tisagenlecleucel) is medically necessary as second-line therapy for large B-cell lymphoma when ALL applicable criteria are met in items a through e:

a. Member is **18 years of age or older** on the date of the infusion (date of service) and KYMRIAH® is prescribed by a hematologist/oncologist; AND

b. Member has a confirmed diagnosis of CD19-positive large B-cell lymphoma, including ANY diagnosis listed in items (1) through (3):

(1) Diffuse large B-cell lymphoma (DLBCL) arising from follicular lymphoma; OR

(2) DBCL not otherwise specified; OR

(3) High-grade B-cell lymphoma; AND

c. Member has relapsed or refractory large B-cell lymphoma after receiving at least **two (2)** prior lines of adequate systemic treatment that include anti-CD20 chemoimmunotherapy (anthracycline-containing chemotherapy regimen for CD20-positive disease and anti-CD20 monoclonal antibody); for members with transformed follicular lymphoma, prior chemotherapy for follicular lymphoma with chemotherapy refractory disease after transformation to DBCL; AND

d. Member has adequate bone marrow, cardiac, pulmonary, and organ function with no active autoimmune disease requiring immunosuppression, and deterioration of the member's medical condition is not expected within four (4) weeks after KYMRIAH® intravenous infusion, as determined by the treating oncologist/hematologist and consistent with the clinical guidelines and limitations for treatment specified in the Limitations section of this policy; AND

e. Member has NOT received prior CAR T-cell treatment; OR

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

5. **TECARTUS™ (Brexucabtagene Autoleucel) to Treat Relapsed or Refractory Mantle Cell Lymphoma (MCL)**:

   The single administration of TECARTUS™ (brexucabtagene autoleucel) is medically necessary as second-line therapy for MCL when ALL applicable criteria are met in items a through e:

   a. Member is **18 years of age or older** on the date of the infusion (date of service) and treatment is prescribed by a hematologist/oncologist; AND

   b. Member has a confirmed diagnosis of CD19-positive MCL; AND

   c. Member has relapsed or refractory MCL after receiving at least **two (2)** prior lines of therapy that include chemoimmunotherapy (an anthracycline or bendamustine--containing chemotherapy regimen, anti-CD20 monoclonal antibody such as rituximab) and a Bruton tyrosine kinase (BTK) inhibitor indicated for mantle cell lymphoma (e.g., acalabrutinib, ibrutinib, zanubrutinib); AND

   d. Member has adequate bone marrow, cardiac, pulmonary, and organ functioning with no active autoimmune disease requiring immunosuppression, and deterioration of the member's medical condition is not expected within four (4) weeks after TECARTUS™ intravenous infusion, as determined by the treating oncologist/hematologist and consistent with the clinical guidelines and limitations for treatment specified in the Limitations section of this policy; AND

   e. Member has NOT received prior CAR T-cell treatment; OR

6. **YESCARTA® (Axicabtagene Ciloleucel) to Treat Relapsed or Refractory Large B-Cell Lymphoma**:

   The single administration of YESCARTA® (axicabtagene ciloleucel) is medically necessary as second-line therapy for large B-cell lymphoma when ALL applicable criteria are met in items a through e:

   a. Member is **18 years of age or older** on the date of the infusion and treatment is prescribed by a hematologist/oncologist; AND

   b. Member has a confirmed diagnosis of CD19-positive large B-cell lymphoma, including ANY diagnosis listed in items (1) through (4):

      (1) Diffuse large B-cell lymphoma (DLBCL) arising from follicular lymphoma; OR

      (2) DBCL not otherwise specified; OR

      (3) High-grade B-cell lymphoma; OR

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

(4) Primary mediastinal large B-cell lymphoma; AND

c. Member has relapsed or refractory B-cell lymphoma after receiving at least **two (2)** prior lines of adequate systemic treatment that includes anti-CD20 chemoimmunotherapy (anthracycline-containing chemotherapy regimen for CD20-positive disease and anti-CD20 monoclonal antibody); for members with transformed follicular lymphoma, prior chemotherapy for follicular lymphoma with chemotherapy refractory disease after transformation to DBCL; AND

d. Member has adequate bone marrow, cardiac, pulmonary, and organ function with no active autoimmune disease requiring immunosuppression, and deterioration of the member's medical condition is not expected within four (4) weeks after YESCARTA® intravenous infusion, as determined by the treating oncologist/hematologist and consistent with the clinical guidelines and limitations for treatment specified in the Limitations section of this policy; AND

e. Member has NOT received prior CAR T-cell treatment.

Limitations and Exclusions

1. **Plan Medical Director Review**:

   a. Plan Medical Director review is required for individual consideration when ABECMA® (idecabtagene vicleucel), BREYANZI® (lisocabtagene maraleucel), KYMRIAH® (tisagenlecleucel), TECARTUS™ (brexucabtagene autoleucel), or YESCARTA®(axicabtagene ciloleucel) is requested for **any indication** due to the risk of severe cytokine release syndrome, neurotoxicity, and the potential for other life-threatening complications of CAR T-cell therapy, including indications considered medically necessary in the Clinical Criteria section and according to FDA-approved guidelines.

   b. Plan Medical Director review is required for the use of other types of modified T-cell immunotherapies, adoptive immunotherapy, and/or CAR T-cell therapy NOT included in the Clinical Criteria section.

   c. Plan Medical Director review is required for the use of KYMRIAH® (tisagenlecleucel) to treat primary mediastinal B-cell lymphoma. KYMRIAH® is NOT FDA approved for the treatment of primary mediastinal B-cell lymphoma.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

2. **Contraindications for CAR T-Cell Therapy:**

Contraindications to CAR T-cell therapy with ABECMA® (idecabtagene vicleucel), BREYANZI® (lisocabtagene maraleucel), KYMRIAH® (tisagenlecleucel), TECARTUS™ (brexucabtagene autoleucel), or YESCARTA® (axicabtagene ciloleucel) include ANY of the conditions in items a through j:

a. Active and/or metastatic malignancy other than the medical diagnosis that meets the FDA-approved indication for treatment for the requested type of CAR T-cell therapy; OR

b. Autoimmune disorder, immunodeficiency disorders (e.g., HIV), or active and uncontrolled infection, including but not limited to active hepatitis B and active hepatitis C if a viral load is detectable. A history of hepatitis B or hepatitis C is permitted if the viral load is undetectable per quantitative polymerase chain reaction (PCR) and/or nucleic acid testing; OR

c. Allogeneic cellular therapy (e.g., donor lymphocyte infusion) or allogeneic stem cell transplant within six (6) weeks prior to the requested CAR T-cell therapy; OR

d. Central nervous system (CNS) involvement:

   (1) CNS disorders such as cerebellar disease, dementia, and seizure disorder; Plan Medical Director review is required for individual consideration of members with a history of CVA (including evaluation of infarct size and location) and post-transplant lymphoproliferative disorder (PTLD) with secondary CNS involvement; OR

   (2) Primary CNS lymphoma; OR

   (3) For KYMRIAH® (tisagenlecleucel) and YESCARTA® (axicabtagene ciloleucel), contraindication also includes secondary CNS lymphoma; OR

e. Graft-versus-host disease grades 2-4 (moderate to very severe); OR

f. Pregnancy or breastfeeding; OR

g. Prior treatment with CAR T-cell therapy, other type of modified T-cell therapy, and/or allogeneic stem cell transplant.

h. Used in combination with other chemotherapy agents NOT specified in the Clinical Criteria section applicable for the requested CAR T-cell therapy; OR

i. ABECMA® (idecabtagene vicleucel) used for members with plasma cell leukemia; OR

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

j. KYMRIAH® (tisagenlecleucel) used for members with Burkitt lymphoma, active CNS group 3 acute lymphoblastic leukemia, and/or to treat refractory or relapsed primary mediastinal large B-cell lymphoma.

3. **Indications Considered Either Experimental and Investigational or NOT Medically Necessary for CAR T-Cell Therapy**:

   Any of the indications in items a through c for ABECMA® (idecabtagene vicleucel), BREYANZI® (lisocabtagene maraleucel), KYMRIAH® (tisagenlecleucel), TECARTUS™ (brexucabtagene autoleucel), or YESCARTA® (axicabtagene ciloleucel) is considered either experimental and investigational or NOT medically necessary due to insufficient scientific evidence demonstrating the clinical validity and clinical utility of treatment:

   a. Repeat administration of CAR T-cell therapy for a Plan member; OR

   b. Applicable criteria are NOT met in the Clinical Criteria section; OR

   c. Administration of CAR T-cell therapy that is NOT consistent with FDA-approved guidelines for the requested CAR T-cell agent. Examples of indications NOT FDA approved for CAR T-cell therapy include but are not limited to any of the following conditions: AIDS-related B-cell lymphoma, human herpes virus 8-positive diffuse large B-cell lymphoma, post-transplant lymphoproliferative disorders (B-cell type), and/or the use of CAR T-cell therapy with solid tumors.

Variations

The Plan uses guidance from the Centers for Medicare & Medicaid Services (CMS) for medical necessity and coverage determinations for Senior Care Options (SCO) members and WellSense Medicare Advantage HMO members, including but not limited to national coverage determinations (NCDs), local coverage determinations (LCDs), local coverage articles (LCAs), and documentation included in Medicare manuals. When there is no guidance from CMS for the requested service for the specified indication on the date of the prior authorization request, Plan-adopted clinical review criteria will be used to determine the medical necessity of the service.

Applicable Coding

The Plan uses and adopts up-to-date Current Procedural Terminology (CPT) codes from the American Medical Association (AMA), International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10) diagnosis codes developed by the World Health Organization and adapted in the United Stated by the National Center for Health Statistics (NCHS) of the Centers for Disease Control under the U.S. Department of Health and Human Services, and the Health Care Common Procedure Coding System (HCPCS) established and maintained by the Centers for Medicare & Medicaid Services (CMS). Since the AMA, NCHS, and CMS may update codes more frequently or at

different intervals than Plan policy updates, the list of applicable codes included in this Plan policy is for informational purposes only, may not be all inclusive, and is subject to change without prior notification. Whether a code is listed in the Applicable Coding section of this Plan policy does not constitute or imply member coverage or provider reimbursement. Providers are responsible for reporting all services using the most up-to-date industry-standard procedure and diagnosis codes as published by the AMA, NCHS, and CMS at the time of the service.

Providers are responsible for obtaining prior authorization for the services specified in the Clinical Criteria section and Limitations and Exclusions section of this Plan policy, even if an applicable code appropriately describing the service that is the subject of this Plan policy is not included in this Applicable Coding section. Review the Plan's reimbursement policies for Plan billing guidelines. Coverage for services is subject to benefit eligibility under the member's benefit plan in effect at the time of the service. Member benefit documents are available at the following websites: www.bmchp.org for BMC HealthNet Plan members, www.SeniorsGetMore.org for Senior Care Options members, www.wellsense.org for WellSense New Hampshire Medicaid members, and www.WellSense.org/Medicare for WellSense Medicare Advantage HMO members.

HCPCS Codes	Description: Codes Considered Medical Necessary for All Plan Products for CAR T-Cell Therapy Harvesting and Administration
0537T	Chimeric antigen receptor T-cell (CAR-T) therapy; harvesting of blood derived T lymphocytes for development of genetically modified autologous CAR T-cells; per day
0538T	Chimeric antigen receptor T-cell (CAR-T) therapy; preparation of blood-derived T lymphocytes for transportation (e.g., cryopreservation, storage)
0539T	Chimeric antigen receptor T-cell (CAR-T) therapy; receipt and preparation of CAR T-cells for administration
0540T	Chimeric antigen receptor T-cell (CAR-T) therapy; CAR T-cell administration, autologous

HCPCS Code	Description: Codes Considered Medical Necessary for All Plan Products for YESCARTA®/Axicabtagene Ciloleucel (CAR T-Cell Agent)
Q2041	Axicabtagene ciloleucel, up to 200 million autologous anti-cd19 car positive viable T cells, including leukapheresis and dose preparation procedures, per therapeutic dose Plan note: This agent is listed on the MassHealth Acute Hospital Carve-Out Drugs List and is subject to additional monitoring and billing requirements according to MassHealth guidelines for MassHealth Plan members. Utilization Reviewers will be reaching out to providers approximately 30 calendar days after the CAR T-cell infusion date to verify clinical effectiveness and at ongoing intervals for long-term monitoring of sustained response.

+ *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

HCPCS Code	Description: Code Considered Medical Necessary for All Plan Products for KYMRIAH®/Tisagenlecleucel (CAR T-Cell Agent)
Q2042	Tisagenlecleucel, up to 600 million car-positive viable T cells, including leukapheresis and dose preparation procedures, per therapeutic dose Plan note: This agent is listed on the MassHealth Acute Hospital Carve-Out Drugs List and is subject to additional monitoring and billing requirements according to MassHealth guidelines for Plan MassHealth members. Utilization Reviewers will be reaching out to providers approximately 30 calendar days after the CAR-T infusion date to verify clinical effectiveness and at ongoing intervals for long-term monitoring of sustained response.

HCPCS Code	Description: Codes Considered Medical Necessary for All Plan Products for TECARTUS™/Brexucabtagene Autoleucel (CAR T-Cell Agent)
Q2053	Brexucabtagene autoleucel, up to 200 million autologous anti-cd19 car positive viable t cells, including leukapheresis and dose preparation procedures, per therapeutic dose Plan note: This agent is listed on the MassHealth Acute Hospital Carve-Out Drugs List and is subject to additional monitoring and billing requirements according to MassHealth guidelines for Plan MassHealth members. Utilization Reviewers will be reaching out to providers approximately 30 calendar days after the CAR-T infusion date to verify clinical effectiveness and at ongoing intervals for long-term monitoring of sustained response.

HCPCS Code	Description: Code Considered Medical Necessary for BREYANZI™/Lisocabtagene Maraleucel (CAR T-Cell Agent)
Q2054	Lisocabtagene maraleucel, up to 110 million autologous anti-cd19 car-positive viable t cells, including leukapheresis and dose preparation procedures, per therapeutic dose Plan note: This agent is listed on the MassHealth Acute Hospital Carve-Out Drugs List and is subject to additional monitoring and billing requirements according to MassHealth guidelines for MassHealth Plan members. Utilization Reviewers will be reaching out to providers approximately 30 calendar days after the CAR T-cell infusion date to verify clinical effectiveness and at ongoing intervals for long-term monitoring of sustained response.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

HCPCS Code	Description: Codes Considered Medical Necessary for All Plan Products for ABECMA®/Idecabtagene Vicleucel (CAR T-Cell Agent)
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 Plan note: Check the MassHealth Acute Hospital Carve-Out Drugs List on the date of the prior authorization request to determine if ABECMA®/idecabtagene vicleucel is subject to additional monitoring and billing requirements for MassHealth members.

References

Abbas F, El Kossi M, Shaheen IS, Sharma A, Halawa A. Post-transplantation lymphoproliferative disorders: Current concepts and future therapeutic approaches. World J Transplant. 2020 Feb 28;10(2):29-46. doi: 10.5500/wjt.v10.i2.29. PMID: 32226769.

Abramson JS, Irwin KE, Frigault MJ, Dietrich J, McGree B, Jordan JT, Yee AJ, Chen YB, Raje NS, Barnes JA, Davis B. Successful anti-CD19 CAR T-cell Therapy in HIV-infected Patients with Refractory High-Grade B-cell Lymphoma. Cancer. 2019 Nov 1;125(21):3692-98. doi: 10.1002/cncr.32411. Epub 2019 Sep 10. PMID: 31503324.

Abramson JS, Palomba ML, Gordon LI, Lunning MA, Wang M, Arnason J, Mehta A, Purev E, Maloney DG, Andreadis C, Sehgal A, Solomon SR, Ghosh N, Albertson TM, Garcia J, Kostic A, Mallaney M, Ogasawara K, Newhall K, Kim Y, Li D, Siddiqi T. Lisocabtagene maraleucel for patients with relapsed or refractory large B-cell lymphomas (TRANSCEND NHL 001): a multicentre seamless design study. Lancet. 2020 Sep 19;396(10254):839-852. doi: 10.1016/S0140-6736(20)31366-0. Epub 2020 Sep 1.PMID: 32888407.

American Cancer Society. About Non-Hodgkin Lymphoma.

American Cancer Society. Key Statistics About Multiple Myeloma. 2021 Jan 12.

American Cancer Society. Treating B-Cell Non-Hodgkin Lymphoma. 2020 Aug 3.

American Society of Clinical Oncology. CAR-T Therapy Policy Brief. 2019 Sep.

American Society of Clinical Oncology. Guidelines, Tools & Resources. Guidelines by Clinical Area.

American Society of Hematology (ASH). ASH Clinical Practice Guidelines.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Berry DA, Zhou S, Higley H, Mukundan L, Fu S, Reaman GH, Wood BL, Kelloff GJ, Jessup JM, Radich JP. Association of Minimal Residual Disease With Clinical Outcome in Pediatric and Adult Acute Lymphoblastic Leukemia: A Meta-analysis. JAMA Oncol. 2017 Jul 13;3(7):e170580. doi: 10.1001/jamaoncol.2017.0580. Epub 2017 Jul 13. PMID: 28494052.

Boyiadzis MM, Dhodapkar MV, Brentjens RJ, Kochenderfer JN, Neelapu SS, Maus MV, Porter DL, Maloney DG, Grupp SA, Mackall CL, June CH, Bishop MR. Chimeric antigen receptor (CAR) T therapies for the treatment of hematologic malignancies: clinical perspective and significance. J Immunother Cancer. 2018 Dec 4;6(1):137. doi: 10.1186/s40425-018-0460-5. PMID: 30514386.

Cavaliere R, Petroni G, Lopes MB, Schiff D, The International Primary Central Nervous System Lymphoma Collaborative Group. Primary Central Nervous System Post-Transplantation Lymphoproliferative Disorder. Cancer. 2010 Feb 15; 116(4): 863–70. doi: 10.1002/cncr.24834. PMID: 20052713.

Chao NJ. Clinical manifestations, diagnosis, and grading of acute graft-versus-host disease. UpToDate. 2019 Jul 3.

Celgene Corporation (a Bristol-Myers Squibb Company). ABECMA®: The First CAR T Cell Therapy for R/R Multiple Myeloma.

Centers for Medicare & Medicaid Services (CMS). Manuals. Publication # 100-02. Medicare Benefit Policy Manual.

Centers for Medicare & Medicaid Services (CMS). Manuals. Publication # 100-03. Medicare National Coverage Determinations (NCD) Manual.

Centers for Medicare & Medicaid Services (CMS). Medicare Coverage Database (MCD).

Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) for Chimeric Antigen Receptor (CAR) T-cell Therapy (110.24). 2019 Aug 7.

Centers for Medicare & Medicaid Services (CMS). Transmittals.

Commonwealth of Massachusetts. Division of Insurance (DOI) Bulletins.

Commonwealth of Massachusetts. MassHealth Drug List. PA Status. Drug Class. Drug Notes: Brand Name Preferred Over Generic Drug (BP), Carve-Out (CO) gent is listed on the Acute Hospital Carve-Out Drugs List and is subject to additional monitoring and billing requirements.

Commonwealth of Massachusetts. MassHealth Drug List. Therapeutic Class Tables. Table 75: Chimeric Antigen Receptor (CAR)-T Immunotherapies. Axicabtagene Ciloleucel/Yescarta, Brexucabtagene Autoleucel/Tecartus, lisocabtagene maraleucel/Breyanzi, and Tisagenlecleucel/Kymriah. 2021 Jun 28.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Commonwealth of Massachusetts. MassHealth Managed Care Entity Bulletin 42. Updated MassHealth Acute Hospital Carve-Out Drugs Requirements. 2020 Sep.

Commonwealth of Massachusetts. MassHealth Provider Bulletins.

Commonwealth of Massachusetts. MassHealth Provider Manuals.

Commonwealth of Massachusetts. MassHealth Transmittal Letters.

Crump M, Neelapu SS, Farooq U, Van Den Neste E, Kuruvilla J, Westin J, Link BK, Hay A, Cerhan JR, Zhu L, Boussetta S, Feng L, Maurer MJ, Navale L, Wiezorek J, Go WY, Gisselbrecht C. Outcomes in refractory diffuse large B-cell lymphoma: results from the international SCHOLAR-1 study. Blood. 2017 Oct 19; 130(16):1800-1808. doi: 10.1182/blood-2017-03-769620. Epub 2017 Aug 3. Erratum in: Blood. 2018 Feb 1;131(5):587-8. PMID: 28774879.

D'Aloia MM, Zizzari IG, Sacchetti B, Pierelli L, Alimandi M. CAR-T cells: the long and winding road to solid tumors. Cell Death Dis. 2018 Feb 15;9(3):282. doi: 10.1038/s41419-018-0278-6. PMID: 29449531.

Daniel E. Novartis gains second FDA approval for CAR T-cell therapy Kymriah. Pharmaceutical Technology. 2018 May 3.

Drugs.com. Kymriah.

Drugs.com. Kymriah Approval History.

Drugs.com. Yescarta.

Drugs.com. Yescarta Approval History.

Freedman AS, Aster JC. Clinical manifestations, pathologic features, and diagnosis of mantle cell lymphoma. UpToDate. 2019 Aug 5.

Freedman AS, Aster JC. Epidemiology, clinical manifestations, pathologic features, and diagnosis of Burkitt lymphoma. UpToDate. 2020 Jan 8.

Freedman AS, Aster JC. Epidemiology, clinical manifestations, pathologic features, and diagnosis of diffuse large B cell lymphoma. UpToDate. 2021 Jul 16.

Freedman AS, Aster JC, Friedberg JW. Primary mediastinal large B cell lymphoma. UpToDate. 2020 Dec 18.

Freedman AS, Friedberg JW. Initial treatment of mantle cell lymphoma. UpToDate. 2021 Apr 21.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Freedman AS, Friedberg JW. Treatment of relapsed or refractory follicular lymphoma. UpToDate. 2021 May 21.

Freedman AS, Friedberg JW. Treatment of relapsed or refractory mantle cell lymphoma. UpToDate. 2021 Apr 21.

Friedberg JW. Relapsed/refractory diffuse large B-cell lymphoma. Hematology Am Soc Hematol Educ Program. 2011;2011:498-505. doi: 10.1182/asheducation-2011.1.498. PMID: 22160081.

Fulciniti M, Amodio N, Cea M, Maiso P, Azab AK. Biological Insights into Myeloma and Other B Cell Malignancies. Biomed Res Int. 2016;2016:5218093. doi: 10.1155/2016/5218093. Epub 2016 Feb 16. PMID: 26989685.

Genetic and Rare Diseases Information Center (GARD). Mantle cell lymphoma. National Institutes of Health. U.S. Department of Health and Human Services.

Ghobadi A. Chimeric antigen receptor T cell therapy for non-Hodgkin lymphoma. Curr Res Transl Med. 2018 May;66(2):43-9. doi: 10.1016/j.retram.2018.03.005. Epub 2018 Apr 11. PMID: 29655961.

Golubovskaya V. CAR-T Cell Therapy: From the Bench to the Bedside. Cancers (Basel). 2017 Oct 31;9(11):E150. doi: 10.3390/cancers9110150. PMID: 29088081.

Hartmann J, Schübler-Lenz M, Bondanza A, Buchholz CJ. Clinical development of CAR T cells-challenges and opportunities in translating innovative treatment concepts. EMBO Mol Med. 2017 Sep;9(9):1183-97. doi: 10.15252/emmm.201607485. PMID: 28765140.

Hayes. Emerging Technology Report. Abecma (Idecabtagene Vicleucel) for Multiple Myeloma. Dallas, TX: Hayes; 2021 Mar 29.

Hayes. Emerging Technology Report. Breyanzi (Lisocabtagene Maraleucel) for Large B-Cell Lymphoma). Dallas, TX: Hayes; 2021 Apr 15.

Hayes. Precision Therapy Assessment. Axicabtagene Ciloleucel (Yescarta) for Treatment of Relapsed or Refractory B-Cell Malignancies. Dallas, TX: Hayes; 2020 Dec 11.

Hayes. Precision Therapy Assessment. Tisagenlecleucel (Kymriah) for Treatment of Relapsed or Refractory CD19+ B-Cell Malignancies. Dallas, TX: Hayes; 2020 Jun 30.

Iragavarapu C, Hildebrandt G. Lisocabtagene Maraleucel for the treatment of B-cell lymphoma. Expert Opin Biol Ther. 2021 Jun 28:1-6. doi: 10.1080/14712598.2021.1933939. Online ahead of print. PMID: 34030548.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Juno Therapeutics, Inc. (a Bristol-Myers Squibb Company). Breyanzi.

Juno Therapeutics, Inc. (a Bristol-Myers Squibb Company). Breyanzi. Risk Evaluation and Mitigation Strategy (REMS).

Kite Pharma Inc. TECARTUS. Important Safety Information. Approved Use.

KITE Pharma, Inc. YESCARTA® (axicabtagene ciloleucel). A Chance for Complete Remission.

Leukemia and Lymphoma Society. Chimeric Antigen Receptor (CAR) T-Cell Therapy.

Liu Y, Chen X, Han W, Zhang Y. Tisagenlecleucel, an approved anti-CD19 chimeric antigen receptor T-cell therapy for the treatment of leukemia. Drugs Today (Barc). 2017 Nov;53(11):597-608. doi: 10.1358/dot.2017.53.11.2725754. PMID: 29451276.

Maude SL, Laetsch TW, Buechner J, Rives S, Boyer M, Bittencourt H, Bader P, Verneris MR, Stefanski HE, Myers GD, Qayed M, De Moerloose B, Hiramatsu H, Schlis K, Davis KL, Martin PL, Nemecek ER, Yanik GA, Peters C, Baruchel A, Boissel N, Mechinaud F, Balduzzi A, Krueger J, June CH, Levine BL, Wood P, Taran T, Leung M, Mueller KT, Zhang Y, Sen K, Lebwohl D, Pulsipher MA, Grupp SA. Tisagenlecleucel in Children and Young Adults with B-Cell Lymphoblastic Leukemia. N Engl J Med. 2018 Feb 1;378(5):439-48. doi: 10.1056/NEJMoa1709866. PMID: 29385370.

Mirzaei HR, Rodriguez A, Shepphird J, Brown CE, Badie B. Chimeric Antigen Receptors T Cell Therapy in Solid Tumor: Challenges and Clinical Applications. Front Immunol. 2017 Dec 22;8:1850. doi: 10.3389/fimmu.2017.01850. eCollection 2017. PMID: 29312333.

National Cancer Institute (NCI). Adult Acute Lymphoblastic Leukemia Treatment (PDQ®) – Health Professional Version.

National Cancer Institute (NCI). Adult Non-Hodgkin Lymphoma Treatment (PDQ®) – Health Professional Version.

National Cancer Institute (NCI). Cancer Stat Facts. Myeloma.

National Cancer Institute (NCI). Plasma Cell Neoplasms (Including Multiple Myeloma) Treatment (PDQ®) – Health Professional Version.

National Cancer Institute (NCI). CAR T Cells: Engineering Patients' Immune Cells to Treat Their Cancers. 2019 Jul 30.

National Cancer Institute (NCI). Childhood Acute Lymphoblastic Leukemia Treatment (PDQ®) – Health Professional Version. 2020 Nov 25.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Acute Lymphoblastic Leukemia. Version 2.2021. 2021 Jul 19.

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). B-Cell Lymphomas. Version 4.2021. 2021 May 5.

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Multiple Myeloma. Version 7.2021. 2021 Apr 26.

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Pediatric Acute Lymphoblastic Leukemia. Version 2.2021. 2021 Jul 19.

National Comprehensive Cancer Network (NCCN). NCCN Guidelines®. NCCN Guidelines for Treatment by Cancer Site.

National Institute for Health and Care Excellence (NICE). Axicabtagene ciloleucel for treating diffuse large B-cell lymphoma and primary mediastinal large B-cell lymphoma after 2 or more systemic therapies. Technology appraisal guidance TA559. 2019 Jan 23.

National Library of Medicine (U.S.). Efficacy and Safety Study of bb2121 in Subjects with Relapsed and Refractory Multiple Myeloma (KarMMa). Identifier NCT03361748. 2017 Dec 13.

National Library of Medicine (U.S.). Lisocabtagene Maraleucel (JCAR017) as Second-Line Therapy (TRANSCEND-PILOT-017006). Identifier NCT03483103. 2018 Jul 26.

National Library of Medicine (U.S.). Study to Evaluate the Efficacy of Brexucabtagene Autoleucel (KTE-X19) in Participants With Relapsed/Refractory Mantle Cell Lymphoma (ZUMA-2). Identifier NCT02601313. 2015 Nov 9.

Neelapu SS, Jacobson CA, Oluwole OO, Munoz J, Deol A, Miklos DB, Bartlett NL, Braunschweig I, Jiang Y, Kim JJ, Zheng L, Rossi JM, Locke FL. Outcomes of older patients in ZUMA-1, a pivotal study of axicabtagene ciloleucel in refractory large B-cell lymphoma. Blood. 2020 Jun 4;135(23):2106-9. doi: 10.1182/blood.2019004162. PMID: 32181801.

Neelapu SS, Locke FL, Bartlett NL, Lekakis LJ, Miklos DB, Jacobson CA, Braunschweig I, Oluwole OO, Siddiqi T, Lin Y, Timmerman JM, Stiff PJ, Friedberg JW, Flinn IW, Goy A, Hill BT, Smith MR, Deol A, Farooq U, McSweeney P, Munoz J, Avivi I, Castro JE, Westin JR, Chavez JC, Ghobadi A, Komanduri KV, Levy R, Jacobsen ED, Witzig TE, Reagan P, Bot A, Rossi J, Navale L, Jiang Y, Aycock J, Elias M, Chang D, Wiezorek J, Go WY. Axicabtagene Ciloleucel CAR T-Cell Therapy in Refractory Large B-Cell Lymphoma. N Engl J Med. 2017 Dec 28;377(26):2531-44. doi: 10.1056/NEJMoa1707447. Epub 2017 Dec 10. PMID: 29226797.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Neelapu SS, Tummala S, Kebriaei P, Wierda W, Gutierrez C, Locke FL, Komanduri KV, Lin Y, Jain N, Daver N, Westin J, Gulbis AM, Loghin ME, de Groot JF, Adkins S, Davis SE, Rezvani K, Hwu P, Shpall EJ. Chimeric antigen receptor T-cell therapy - assessment and management of toxicities. Nat Rev Clin Oncol. 2018 Jan;15(1):47-62. doi: 10.1038/nrclinonc.2017.148. Epub 2017 Sep 19. PMID: 28925994.

New Hampshire Department of Health and Human Services. Billing Manuals.

New Hampshire Department of Health and Human Services. Provider Notices.

Novartis. KYMRIAH® (tisagenlecleucel). The First FDA-approved CAR-T cell therapy.

Novartis. Risk Evaluation and Mitigation Strategy (REMS). KYMRIAH.

Novartis. Treatment Information. KYMRIAH.

Roy L. Novartis' Kymriah receives FDA approval for B-cell precursor ALL treatment. Pharmaceutical Technology. 2017 Aug 31.

Salmikangas P, Kinsella N, Chamberlain P. Chimeric Antigen Receptor T-Cells (CAR T-Cells) for Cancer Immunotherapy - Moving Target for Industry? Pharm Res. 2018 May 31;35(8):152. doi: 10.1007/s11095-018-2436-z. PMID: 29855723.

Santomasso B, Bachier C, Westin J, Rezvani K, Shpall EJ. The Other Side of CAR T-Cell Therapy: Cytokine Release Syndrome, Neurologic Toxicity, and Financial Burden. Am Soc Clin Oncol Educ Book. 2019 Jan;39:433-444. doi: 10.1200/EDBK_238691. Epub 2019 May 17. PMID: 31099694.

Saudemont A, Jespers L, Clay T. Current Status of Gene Engineering Cell Therapeutics. Front Immunol. 2018 Feb 5;9:153. doi: 10.3389/fimmu.2018.00153. eCollection 2018. PMID: 29459866.

Schiffer CA. Hyperleukocytosis and leukostasis in hematologic malignancies. UpToDate. 2019 Nov 13.

Schuster SJ, Bishop MR, Tam CS, Waller EK, Borchmann P, McGuirk JP, Jäger U, Jaglowski S, Andreadis C, Westin JR, Fleury I, Bachanova V, Foley SR, Ho PJ, Mielke S, Magenau JM, Holte H, Pantano S, Pacaud LB, Awasthi R, Chu J, Anak Ö, Salles G, Maziarz RT; JULIET Investigators. Tisagenlecleucel in Adult Relapsed or Refractory Diffuse Large B-Cell Lymphoma. Clinical Trial. N E ngl J Med. 2019 Jan 3;380(1):45-56. doi: 10.1056/NEJMoa1804980. Epub 2018 Dec 1.PMID: 30501490.

Shah N, Chari A, Scott E, Mezzi K, Usmani SZ. B-cell maturation antigen (BCMA) in multiple myeloma: rationale for targeting and current therapeutic approaches. Leukemia. 2020 Apr;34(4):985-1005. doi: 10.1038/s41375-020-0734-z. Epub 2020 Feb 13. PMID: 32055000.

Swerdlow SH, Campo E, Pileri SA, Harris NL, Stein H, Siebert R, Advani R, Ghielmini M, Salles GA, Zelenetz AD, Jaffe ES. The 2016 revision of the World Health Organization classification of lymphoid

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

neoplasms. Blood. 2016 May 19;127(20):2375-90. doi: 10.1182/blood-2016-01-643569. Epub 2016 Mar 15. PMID: 26980727.

Tahir A. Is Chimeric Antigen Receptor T-cell Therapy the Future of Autoimmunity Management? Cureus. 2018 Oct 3;10(10):e3407. doi: 10.7759/cureus.3407. PMID: 30533341.

Tai YT, Anderson KC. Targeting B-cell maturation antigen in multiple myeloma. Immunotherapy. 2015;7(11):1187-99. doi: 10.2217/imt.15.77. Epub 2015 Sep 15.PMID: 26370838

U.S. Food and Drug Administration (FDA). Approved Risk Evaluation and Mitigation Strategies (REMS). KYMRIAH. 2019 Jun 20.

U.S. Food and Drug Administration (FDA). Approved Risk Evaluation and Mitigation Strategies (REMS). YESCARTA. 2019 Apr 19.

U.S. Food and Drug Administration (FDA). Biologics License Application (BLA) Approval Letter for Axicabtagene Ciloleucel. 2017 Oct 18.

U.S. Food and Drug Administration (FDA). Cellular & Gene Therapy Products. BREYANZI (lisocabtagene maraleucel). 2021 Mar 4.

U.S. Food and Drug Administration (FDA). FDA News Release. FDA approval brings first gene therapy to the United States. 2017 Aug 30. Updated 2018 Mar 26.

U.S. Food and Drug Administration (FDA). FDA News Release. FDA approves CAR-T cell therapy to treat adults with certain types of large B-cell lymphoma. 2017 Oct 18. Updated 2018 Mar 21.

U.S. Food and Drug Administration (FDA). FDA News Release. FDA Approves First Cell-Based Gene Therapy for Adult Patients with Multiple Myeloma. 2021 Mar 27.

U.S. Food and Drug Administration (FDA). Product Information. ABECMA (idecabtagene vicleucel).

U.S. Food and Drug Administration (FDA). Product Information. BREYANZI (lisocabtagene maraleucel).

U.S. Food and Drug Administration (FDA). Product Information. KYMRIAH (tisagenlecleucel).

U.S. Food and Drug Administration (FDA). Product Information. TECARTUS (brexucabtagene autoleucel).

U.S. Food and Drug Administration (FDA). Product Information. YESCARTA (axicabtagene ciloleucel).

U.S. Food and Drug Administration (FDA). Resources for Information. Approved Drugs. FDA approves lisocabtagene maraleucel for relapsed or refractory large B-cell lymphoma. 2021 Feb 5.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Vormittag P, Gunn R, Ghorashian S, Veraitch FS. A guide to manufacturing CAR T cell therapies. Curr Opin Biotechnol. 2018 Oct;53:164-181. doi: 10.1016/j.copbio.2018.01.025. Epub 2018 Feb 18. PMID: 29462761.

Wang M, Munoz J, Goy A, Locke FL, Jacobson CA, Hill BT, Timmerman JM, Holmes H, Jaglowski S, Flinn IW, McSweeney PA, Miklos DB, Pagel JM, Kersten MJ, Milpied N, Fung H, Topp MS, Houot R, Beitinjaneh A, Peng W, Zheng L, Rossi JM, Jain RK, Rao AV, Reagan PM. KTE-X19 CAR T-Cell Therapy in Relapsed or Refractory Mantle-Cell Lymphoma. N Engl J Med. 2020 Apr 2;382(14):1331-42. doi: 10.1056/NEJMoa1914347. PMID: 32242358.

Wang Z, Han W. Biomarkers of cytokine release syndrome and neurotoxicity related to CAR-T cell therapy. Biomark Res. 2018 Jan 22;6:4. doi: 10.1186/s40364-018-0116-0. eCollection 2018. PMID: 29387417.

Zhang LN, Song Y, Liu D. CD19 CAR-T cell therapy for relapsed/refractory acute lymphoblastic leukemia: factors affecting toxicities and long-term efficacies. J Hematol Oncol. 2018 Mar 15;11(1):41. doi: 10.1186/s13045-018-0593-5. PMID: 29544528

Zheng PP, Kros JM, Li J. Approved CAR T cell therapies: ice bucket challenges on glaring safety risks and long-term impacts. Drug Discov Today. 2018 Jun;23(6):1175-82. doi: 10.1016/j.drudis.2018.02.012. Epub 2018 Mar 1. PMID: 29501911.

Policy History

Original Approval Date	Original Effective Date* and Version Number	Policy Owner	Original Policy Approved by
Regulatory Approval: N/A Internal Approval: 10/17/18: Medical Policy, Criteria, and Technology Assessment Committee (MPCTAC)	01/01/19 Version 1	Medical Policy Manager as Chair of MPCTAC	MPCTAC

* Effective date of WellSense Medicare Advantage HMO product: 01/01/22

Policy title from 01/01/19 to 04/20/21 was *CAR T-Cell Therapy with KYMRIAH® or YESCARTA® to Treat Hematological Malignancies*. As of 05/01/21, policy title changed to *CAR T-Cell Therapy to Treat Hematological Malignancies*.

Policy Revisions History			
Review Date	**Summary of Revisions**	**Revision Effective Date**	**Approved by**

Policy Revisions History			
		and Version Number	
12/01/18	Review for effective date 01/01/19. Industry-wide updates made to the code list in the Applicable Coding section.	01/01/19 Version 2	12/19/18: MPCTAC
09/01/19	Review for effective date 12/01/19. Revised criteria in the Medical Policy Statement and Limitations sections. Administrative changes made to the Definitions, Clinical Background Information, References, and Reference to Applicable Laws and Regulations sections.	12/01/19 Version 3	09/18/19: MPCTAC
07/01/20	Review for effective date 08/01/20. Administrative changes made to the Limitations and References sections.	08/01/20 Version 4	07/15/20: MPCTAC
11/01/20	Review for effective date 12/01/20. Administrative changes made to the Medical Policy Statement and References sections. Plan notes added to the Applicable Coding section.	12/01/20 Version 5	11/18/20: MPCTAC
02/01/21	Review for effective date 05/01/21. Administrative changes made to the Policy Summary, Description of Item or Service, Definitions, Clinical Background Information, and References sections. Criteria revised in the Medical Policy Statement and Limitations sections. Coding and Plan notes updated in the Applicable Coding section. Revised policy title.	05/01/21 Version 6	02/17/21: MPCTAC
03/01/21	Review for effective date 05/01/21. Industry-wide code revisions made for TECARTUS for all Plan products and Plan notes revised in the Applicable Coding section.	05/01/21 Version 7	03/17/21: MPCTAC
08/01/21	Review fore effective date 11/01/21. Administrative changes made to the Policy Summary, Description of Item or Service, Definitions, Clinical Background Information, and References sections. Criteria revised in the Medical Policy Statement and Limitations sections.	11/01/21 Version 8	08/27/21: MPCTAC (electronic vote)

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

Policy Revisions History			
	Coding revised in the Applicable Coding section.		
10/01/21	Review for effective date 11/01/21. Industry-wide code revisions made for all Plan products and Plan notes revised in the Applicable Coding section. Adopted new medical policy template; removed administrative sections, the Medical Policy Statement section renamed the Clinical Criteria section, and the Limitations section renamed the Limitations and Exceptions section. Added WellSense Medicare Advantage HMO as an applicable product effective 01/01/22.	11/01/21 Version 9	10/20/21: MPCTAC
12/01/21	Review for effective date 01/01/22. Industry-wide code revisions made to the Applicable Coding section.	01/01/22 Version 10	Not applicable because industry-wide code revisions; 12/15/21: MPCTAC review

Next Review Date

07/01/22

Authorizing Entity

MPCTAC

Disclaimer Information: +

Medical Policies are the Plan's guidelines for determining the medical necessity of certain services or supplies for purposes of determining coverage. These Policies may also describe when a service or supply is considered experimental or investigational, or cosmetic. In making coverage decisions, the Plan uses these guidelines and other Plan Policies, as well as the Member's benefit document, and when appropriate, coordinates with the Member's health care Providers to consider the individual Member's health care needs.

Plan Policies are developed in accordance with applicable state and federal laws and regulations, and accrediting organization standards (including NCQA). Medical Policies are also developed, as appropriate, with consideration of the medical necessity definitions in various Plan products, review of current literature, consultation with practicing Providers in the Plan's service area who are medical experts in the particular field, and adherence to FDA and other government agency policies. Applicable state or federal mandates, as well as the Member's benefit document, take precedence over these guidelines. Policies are reviewed and updated on an annual basis, or more frequently as needed. Treating providers are solely responsible for the medical advice and treatment of Members.

+ *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.

The use of this Policy is neither a guarantee of payment nor a final prediction of how a specific claim(s) will be adjudicated. Reimbursement is based on many factors, including member eligibility and benefits on the date of service; medical necessity; utilization management guidelines (when applicable); coordination of benefits; adherence with applicable Plan policies and procedures; clinical coding criteria; claim editing logic; and the applicable Plan – Provider agreement.

[+] *Plan* refers to Boston Medical Center Health Plan, Inc. and its affiliates and subsidiaries offering health coverage plans to enrolled members. The Plan operates in Massachusetts under the trade name Boston Medical Center HealthNet Plan and in other states under the trade name WellSense Health Plan.