





SERVICE: Brexucabtagene autoleucel

(Tecartus™)

Policy Number: 281

Effective Date: 1/1/2024

Last Review: 10/26/2023

Next Review: 10/26/2024

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.

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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 <u>Texas Medicaid Provider Procedures</u> <u>Manual | TMHP</u> (TMPPM). Texas Mandate HB154 is applicable for Medicaid plans.

BSWHP may consider brexucabtagene autoleucel (Tecartus™) medically necessary for the treatment of mantel cell lymphoma when ALL of the following criteria are met:

- 1. Member is ≥ 18 years old; **AND**
- 2. Member has documentation of CD19 tumor expression; AND
- 3. Member diagnosed by a hematologist or oncologist; AND
- 4. Member will be using brexucabtagene autoleucel at a certified treatment center; AND
- 5. Member has at least 1 measurable lesion; AND
- 6. Member has relapsed or refractory disease defined as disease progression after last regimen OR refractory disease defined as failure to achieve a partial response or complete response to the last regimen; AND member must have received adequate prior therapy including **ALL** of the following:
  - Anthracycline- or bendamustine-containing chemotherapy
  - Anti-CD20 monoclonal antibody
  - BTK inhibitor therapy with ibrutinib or acalabrutinib

#### **AND**

- 7. Member has or will receive lymphodepleting chemotherapy before infusion of brexucabtagene autoleucel; **AND**
- 8. Member will NOT be treated with more than 2 x 108 viable CAR-T cells; AND
- 9. Member does NOT have any of the following conditions:
  - Active hepatitis B (HBs AG-positive), active hepatitis C, or an uncontrolled infection
  - History of a seizure disorder, cerebrovascular ischemia/hemorrhage, dementia, cerebellar disease, or any autoimmune disease with CNS involvement







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- History of allogeneic stem cell transplantation
- Primary immunodeficiency

#### AND

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

BSWHP may consider brexucabtagene autoleucel (Tecartus™) medically necessary for the treatment of B-cell precursor acute lymphoblastic leukemia (ALL) when ALL of the following criteria are met:

- 1. Member is ≥ 18 years old; **AND**
- 2. Member has documentation of CD19 tumor expression; AND
- 3. Member diagnosed by a hematologist or oncologist; AND
- 4. Member will be using brexucabtagene autoleucel at a certified treatment center; AND
- 5. Member has relapsed or refractory disease defined as one of the following:
  - refractory to first-line therapy (i.e. primary refractory)
  - first relapse following a remission lasting ≤ 12 months
  - relapsed or refractory ALL after second-line or higher therapy
  - relapsed or refractory ALL at least 100 days after allogeneic stem cell transplantation (HSCT)

### AND

- 6. Member has or will receive lymphodepleting chemotherapy before infusion of brexucabtagene autoleucel; **AND**
- 7. Member will NOT be treated with more than 1 x 108 viable CAR-T cells; AND
- 8. Member has NOT been taking immunosuppressive medications within 4 weeks prior to infusion; **AND**
- 9. Member does NOT have any of the following conditions:
  - Active or serious infection including hepatitis B (HBs AG-positive), hepatitis C, or an uncontrolled infection
  - Active graft-vs-host disease
  - History of CNS disorders including CNS-2 disease with neurologic changes and CNS-3 disease irrespective of neurological changes

### **AND**

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

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



MEDICAL COVERAGE POLICY
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BSWHP considers brexucabtagene autoleucel 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).

The U. S. Food and Drug Administration (FDA) granted accelerated approval for brexucabtagene autoleucel (Tecartus™) on July 24, 2020 for the treatment of adult patients with relapsed or refractory mantle cell lymphoma (MCL). The indication is approved under accelerated approval based on overall response rate and durability of response and continued approval for this indication may be contingent upon a confirmatory trial. The boxed warning includes the clarification that brexucabtagene autoleucel is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) because of the risk of cytokine release syndrome (CRS) and neurological toxicities.

In a multicenter phase two trial, a total of 74 patients were enrolled to evaluate the safety and efficacy of brexucabtagene autoleucel. To be eligible, patients had to have MCL that had relapsed or was refractory and had previous therapy that included anthracycline- or bendamustine-containing chemotherapy, an anti-CD20 monoclonal antibody, and BTK inhibitor therapy with ibrutinib or acalabrutinib. It was found that 85% of patients had an objective response and 59% had a complete response. Regarding estimated progression-free survival and overall survival, the percentages of patients were 61% and 83% respectively. With respect to the safety of brexucabtagene autoleucel, 99% of patients had an adverse event of grade 3 or higher with the most common types being cytopenias (94%) and infections (32%). For serious adverse events, it was found that 68% of patients experienced these types of adverse events.

In October 2021 the FDA approved brexucabtagene autoleucel for the treatment of adult patients with relapsed or refractory B-cell precursor acute lymphoblastic leukemia (ALL) based on an open-label, single-arm, multicenter phase 1/2 trial. Eligible patients were adults with primary refractory ALL, first relapse following a remission lasting ≤ 12 months, relapsed or refractory ALL after second-line or higher therapy, or relapsed or refractory ALL at least 100 days after allogeneic stem cell transplantation (HSCT). Of 71 patient enrolled and leukapheresed, 54 were efficacy-evaluable. The primary end points were the percentage of participants experiencing dose-limiting toxicities (DLTs) and overall complete remission (CR) rate. 28 (51.9%) of the 54 evaluable patients achieved a complete remission (CR) with 3 months after the infusion. No DLTs occurred in the DLT-evaluable cohort.







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### **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:	36511 Therapeutic apheresis; for white blood cells	
HCPCS Codes:	Q2053 Brexucabtagene autoleucel, up to 200 million autologous anti-cd19 car positive viable t cells, including leukapheresis and dose preparation procedures, per therapeutic dose	
ICD10 codes:	C83.10-C83.19 Mantle cell lymphoma	
ICD10 Not covered:		

#### **POLICY HISTORY:**

Status	Date	Action
New	11/19/2021	New policy
Updated	01/28/2021	Minor updates to criteria and excluded sections
Updated	04/22/2021	Medicaid instructions added.
Updated	05/27/2021	Removed Oncology Analytics line, added apheresis criteria,
	05/21/2021	reformatted criteria
Updated	07/22/2021	Added clinician reviewer criteria
Updated	06/23/2022	Added NCD information
Updated		Removed language with CMS LCD since NCD applies.
	12/01/2022	Removed Texas Mandate HB1584 language from main policy
		section as the policy is compliant. Added criteria for ALL.
Reviewed	10/26/2023	Applied new layout and format.

### **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.

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- 2. Bijal DS, Bishop MR, Oluwole OO, et al. KTE-X19 anti-CD19 CAR T-cell therapy in adult relapsed/refractory acute lymphoblastic leukemia: ZUMA-3 phase 1 results. Blood. 2021;138(1):11-22.
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#### 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.