



Louisiana

Hematopoietic Cell Transplantation for Non-Hodgkin Lymphomas

Policy # 00062

Original Effective Date: 01/28/2002

Current Effective Date: 11/09/2020

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: Hematopoietic Cell Transplantation for Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma is addressed separately in medical policy 00052.

Note: Hematopoietic Cell Transplantation Hodgkin Lymphoma is addressed separately in medical policy 00057.

Note: Hematopoietic Cell Transplantation for Primary Amyloidosis or Waldenström Macroglobulinemia is addressed separately in medical policy 00138.

When Services May Be Eligible for Coverage

Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- *Benefits are available in the member's contract/certificate, and*
- *Medical necessity criteria and guidelines are met.*

Based on review of available data, the Company may consider for patients with non-Hodgkin lymphoma (NHL) B-cell subtypes aggressive (except mantle cell lymphoma), either allogeneic hematopoietic cell transplantation (HCT) using a myeloablative conditioning regimen or autologous hematopoietic cell transplantation (HCT) to be **eligible for coverage.****

Patient Selection Criteria

Coverage eligibility for the use of hematopoietic cell transplantation (HCT) for non-Hodgkin lymphomas (NHLs) will be considered when ANY of the following criteria are met:

- As salvage therapy for patients who do not achieve a complete remission (CR) after first-line treatment (induction) with a full course of standard-dose chemotherapy; OR
- To achieve or consolidate a complete remission (CR) for those in a chemosensitive first or subsequent relapse; OR

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- To consolidate a first complete remission (CR) in patients with diffuse large B-cell lymphoma, with an age-adjusted International Prognostic Index score that predicts a high- or high-intermediate risk of relapse.

For Patients with Mantle Cell Lymphoma:

Based on review of available data, the Company may consider autologous hematopoietic cell transplantation (HCT) to consolidate a first remission to be **eligible for coverage.****

Based on review of available data, the Company may consider allogeneic hematopoietic cell transplantation (HCT), myeloablative or reduced-intensity conditioning (RIC) as salvage therapy to be **eligible for coverage.****

For Patients with Non-Hodgkin Lymphoma (NHL) B-Cell Subtypes:

Based on review of available data, the Company may consider patients with non-Hodgkin lymphoma (NHL) B-cell subtypes indolent, either allogeneic hematopoietic cell transplantation (HCT) using a myeloablative conditioning regimen or autologous hematopoietic cell transplantation (HCT) to be **eligible for coverage.****

- As salvage therapy for patients who do not achieve complete remission (CR) after first-line treatment (induction) with a full course of standard-dose chemotherapy; OR
- To achieve or consolidate complete remission (CR) for those in a first or subsequent chemosensitive relapse, whether or not their lymphoma has undergone transformation to a higher grade.

Based on review of available data, the Company may consider reduced-intensity conditioning (RIC) allogeneic hematopoietic cell transplantation (HCT) as a treatment of non-Hodgkin lymphoma (NHL) in patients who meet criteria for an allogeneic hematopoietic cell transplantation (HCT) but who do not qualify for a myeloablative allogeneic hematopoietic cell transplantation (HCT) to be **eligible for coverage.**** (see Policy Guidelines).

For Patients with Mature T-Cell or Natural Killer (NK)-Cell (Peripheral T-Cell) Neoplasms:

Based on review of available data, the Company may consider autologous hematopoietic cell transplantation (HCT) to consolidate a first complete remission (CR) in high-risk subtypes to be **eligible for coverage.**** (see Policy Guidelines).

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Based on review of available data, the Company may consider autologous or allogeneic hematopoietic cell transplantation (HCT) (myeloablative or reduced-intensity conditioning [RIC]) as salvage therapy to be **eligible for coverage**.**

When Services Are Considered Investigational

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers either autologous hematopoietic cell transplantation (HCT) or allogeneic hematopoietic cell transplantation (HCT) to be **investigational**.*

- As initial therapy (i.e., without a full course of standard-dose induction chemotherapy) for any non-Hodgkin lymphoma (NHL); OR
- To consolidate a first complete remission (CR) for patients with diffuse large B-cell lymphoma and an International Prognostic Index score that predicts a low- or low-intermediate risk of relapse; OR
- To consolidate a first complete remission (CR) for those with indolent non-Hodgkin lymphoma (NHL) B-cell subtypes.

Based on review of available data, the Company considers tandem transplants to treat patients with any stage, grade, or subtype of non-Hodgkin lymphoma (NHL) to be **investigational**.*

For Patients with Mature T-Cell or Natural Killer (NK)-Cell (Peripheral T-Cell) Neoplasms:

Based on review of available data, the Company considers allogeneic hematopoietic cell transplantation (HCT) to consolidate a first remission to be **investigational**.*

For Patients with Mantle Cell Lymphoma (MCL):

Based on review of available data, the Company considers autologous hematopoietic cell transplantation (HCT) as salvage therapy to be **investigational**.*

Based on review of available data, the Company considers allogeneic hematopoietic cell transplantation (HCT) to consolidate a first remission to be **investigational**.*

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Note: Small lymphocytic lymphoma may be considered a node-based variant of chronic lymphocytic leukemia. Therefore, small lymphocytic lymphoma is considered along with chronic lymphocytic leukemia in evidence review 00052. Lymphoplasmacytic lymphoma/Waldenström macroglobulinemia is considered in evidence review 00138.

Policy Guidelines

Reduced-intensity conditioning would be considered an option in patients who meet criteria for allogeneic HCT, but whose age (typically >55 years) or comorbidities (eg, liver or kidney dysfunction, generalized debilitation, prior intensive chemotherapy) preclude the use of a standard conditioning regimen.

In patients who qualify for a myeloablative allogeneic HCT on the basis of overall health and disease status, allogeneic HCT using either myeloablative or RIC may be considered. However, a myeloablative conditioning regimen with allogeneic HCT may benefit younger patients with good performance status and minimal comorbidities more than allogeneic HCT with RIC.

A chemosensitive relapse is defined as relapsed non-Hodgkin lymphoma that does not progress during or immediately after standard-dose induction chemotherapy (ie, achieves stable disease or a partial response).

Transformation describes a lymphoma whose histologic pattern has evolved to a higher grade lymphoma. Transformed lymphomas typically evolve from a nodular pattern to a diffuse pattern. Tandem transplants usually are defined as the planned administration of two successive cycles of high-dose myeloablative chemotherapy, each followed by infusion of autologous hematopoietic stem cells, whether or not there is evidence of persistent disease following the first treatment cycle. Sometimes, the second cycle may use nonmyeloablative immunosuppressive conditioning followed by infusion of allogeneic stem cells.

The term *salvage therapy* describes therapy given to patients with refractory or relapsed disease. For patients with peripheral T-cell lymphoma, salvage therapy includes patients who do not achieve a complete response (eg, achieve only a partial response, have no response, or have progressive disease) with first-line induction chemotherapy (refractory disease) or who relapse after achieving a complete response with first-line induction chemotherapy. For mantle cell lymphoma, salvage

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therapy includes patients with progressive disease with first-line induction chemotherapy (refractory disease) or in patients who relapse after a complete or partial response after initial induction chemotherapy, or patients who fail a previous autologous HCT.

High-risk (aggressive) T-cell and natural killer cell neoplasms are a clinically heterogeneous group of rare disorders, most of which have an aggressive clinical course and poor prognosis. The exception includes the following subtypes, which typically have a relatively indolent and protracted course: T-cell large granulocyte leukemia, chronic lymphoproliferative disorder of natural killer cells, early-stage mycosis fungoides, primary cutaneous anaplastic large-cell lymphoma, and anaplastic lymphoma kinase-anaplastic large-cell lymphomas.

Background/Overview

Treatment for Non-Hodgkin Lymphoma

Hematopoietic Cell Transplantation

HCT is a procedure in which hematopoietic stem cells are intravenously infused to restore bone marrow and immune function in cancer patients who receive bone marrow-toxic doses of cytotoxic drugs with or without whole-body radiotherapy. Hematopoietic stem cells may be obtained from the transplant recipient (autologous HCT) or a donor (allogeneic HCT [allo-HCT]). They can be harvested from bone marrow, peripheral blood, or umbilical cord blood shortly after delivery of neonates.

Immunologic compatibility between infused hematopoietic stem cells and the recipient is not an issue in autologous HCT. In allogeneic stem cell transplantation, immunologic compatibility between donor and patient is a critical factor for achieving a successful outcome. Compatibility is established by typing of human leukocyte antigens (HLA) using cellular, serologic, or molecular techniques. HLA refers to the gene complex expressed at the HLA-A, -B, and -DR (antigen-D related) loci on each arm of chromosome 6. An acceptable donor will match the patient at all or most of the HLA loci.

Conditioning for Hematopoietic Cell Transplantation

Conventional Conditioning

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The conventional (“classical”) practice of allo-HCT involves administration of cytotoxic agents (e.g., cyclophosphamide, busulfan) with or without total body irradiation at doses sufficient to cause bone marrow ablation in the recipient. The beneficial treatment effect of this procedure is due to a combination of the initial eradication of malignant cells and subsequent graft-versus-malignancy effect mediated by non-self-immunologic effector cells. While the slower graft-versus-malignancy effect is considered the potentially curative component, it may be overwhelmed by existing disease in the absence of pretransplant conditioning. Intense conditioning regimens are limited to patients who are sufficiently medically fit to tolerate substantial adverse effects. These include opportunistic infections secondary to loss of endogenous bone marrow function and organ damage or failure caused by cytotoxic drugs. Subsequent to graft infusion in allo-HCT, immunosuppressant drugs are required to minimize graft rejection and graft-versus-host disease, which increases susceptibility to opportunistic infections.

The success of autologous HCT is predicated on the potential of cytotoxic chemotherapy, with or without radiotherapy, to eradicate cancerous cells from the blood and bone marrow. This permits subsequent engraftment and repopulation of the bone marrow with presumably normal hematopoietic stem cells obtained from the patient before undergoing bone marrow ablation. Therefore, autologous HCT is typically performed as consolidation therapy when the patient’s disease is in complete remission. Patients who undergo autologous HCT are also susceptible to chemotherapy-related toxicities and opportunistic infections before engraftment, but not graft-versus-host disease.

Reduced-Intensity Conditioning Allogeneic Hematopoietic Cell Transplantation

RIC refers to the pretransplant use of lower doses of cytotoxic drugs or less intense regimens of radiotherapy than are used in traditional full-dose myeloablative conditioning treatments. Although the definition of RIC is variable, with numerous versions employed, all regimens seek to balance the competing effects of relapse due to residual disease and non-relapse mortality. The goal of RIC is to reduce disease burden and to minimize associated treatment-related morbidity and non-relapse mortality in the period during which the beneficial graft-versus-malignancy effect of allogeneic transplantation develops. RIC regimens range from nearly total myeloablative to minimally myeloablative with lymphoablation, with intensity tailored to specific diseases and patient condition. Patients who undergo RIC with allo-HCT initially demonstrate donor cell engraftment and bone marrow mixed chimerism. Most will subsequently convert to full-donor chimerism. In this review,

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the term *reduced-intensity conditioning* will refer to all conditioning regimens intended to be nonmyeloablative.

FDA or Other Governmental Regulatory Approval

U.S. Food and Drug Administration (FDA)

The FDA regulates human cells and tissues intended for implantation, transplantation, or infusion through the Center for Biologics Evaluation and Research, under Code of Federal Regulation, Title 21, parts 1270 and 1271. Hematopoietic stem cells are included in these regulations.

Rationale/Source

Hematopoietic cell transplantation refers to a procedure by which hematopoietic stem cells are infused to restore bone marrow function in cancer patients who receive bone-marrow-toxic doses of cytotoxic drugs, with or without whole-body radiotherapy. Hematopoietic stem cells may be obtained from the transplant recipient (autologous HCT) or a donor (allogeneic HCT [allo-HCT]). They can be harvested from bone marrow, peripheral blood, or umbilical cord blood shortly after delivery of neonates. Although umbilical cord blood is an allogeneic source, the stem cells in it are antigenically “naive” and thus are associated with a lower incidence of rejection or graft-versus-host disease.

For individuals who have indolent B-cell NHL who receive autologous HCT as first-line therapy, the evidence includes randomized trials and systematic reviews. The relevant outcomes are overall survival (OS), disease-specific survival (DSS), change in disease status, morbid events, and treatment-related mortality and morbidity. Randomized trials have not shown a survival advantage with HCT as first-line therapy for indolent B-cell lymphomas; however, randomized studies have shown a survival benefit for relapsed disease. Observational studies have shown similar results. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have aggressive B-cell NHL, excluding mantle cell lymphoma (MCL), who receive autologous HCT as consolidation therapy after first complete remission, the evidence includes randomized trials and systematic reviews. The relevant outcomes are OS, DSS, change in disease status, morbid events, and treatment-related mortality and morbidity. While the data from the randomized trials offer conflicting results, some data have revealed an OS benefit in patients with aggressive B-cell lymphomas (at high- or high-intermediate risk of relapse) who receive HCT

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to consolidate a first complete remission. Randomized studies of HCT for relapsed aggressive B-cell lymphomas have also shown an OS benefit with the previously described approach. Results of a retrospective study comparing autologous and allo-HCT for relapsed or refractory showed more positive outcomes for autologous HCTs. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have NHL, excluding MCL, who receive tandem autologous and allo-HCT, the evidence includes several nonrandomized trials. Relevant outcomes are OS, DSS, change in disease status, morbid events, and treatment-related mortality and morbidity. No randomized studies have been conducted on the use of tandem HCT for the treatment of NHL, and the published evidence comprises a limited number of patients. Presently, conclusions on the use of tandem transplants cannot be made about autologous and allo-HCT. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have MCL who receive autologous, allogeneic, or tandem HCT, the evidence includes case series. The relevant outcomes are OS, DSS, change in disease status, morbid events, and treatment-related mortality and morbidity. Due in part to the rarity of this disease, randomized trials on the use of HCT for MCL have not been conducted. Case series have shown long-term disease control of this aggressive lymphoma with autologous HCT (with rituximab) to consolidate a first remission; however, the use of autologous HCT in the relapsed setting has not shown improved outcomes. Allo-HCT has shown prolonged disease control in the relapsed or refractory setting. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have peripheral T-cell lymphoma (PTCL) who receive autologous or allo-HCT, the evidence includes prospective trials and case reports. The relevant outcomes are OS, DSS, change in disease status, morbid events, and treatment-related mortality and morbidity. The role of HCT in PTCL is not well-defined. Few studies have been conducted, and most were performed retrospectively, with a limited number of patients; moreover, the patient populations were heterogeneous and included good- and poor-risk patients in the same study. Patient population and characteristics of the studies can be explained partially by the rarity and heterogeneity of the particular group of lymphomas addressed. Additionally, studies of this nature often mix 3 types of patients: one type of patient has PTCL not otherwise specified, which has a poorer prognosis; another type has anaplastic lymphoma kinase-positive anaplastic large-cell lymphomas, which has a better prognosis-even with conventional chemotherapy regimens; and a third type has anaplastic

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lymphoma kinase-negative anaplastic large-cell lymphomas, which has a worse prognosis than anaplastic lymphoma kinase-positive anaplastic large-cell lymphomas (but better than patients with PTCL not otherwise specified). There have been no randomized studies comparing chemotherapy regimens solely in patients with PTCL (ie, some randomized studies have included PTCL with aggressive B-cell lymphomas). For first-line therapy, results from recent phase 2 studies with autologous HCT as consolidation offers the best survival outcomes for patients with high-risk features; randomized trials to confirm this have not been performed. No relevant data for the use of allo-HCT in the first-line setting is available. Patients with relapsed or refractory PTCL are generally considered incurable with chemotherapy alone. In the salvage setting, data have shown that the use of HCT may improve survival outcomes similar to the results seen in corresponding aggressive B-cell lymphomas in the same treatment setting. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

Supplemental Information

Clinical Input From Physician Specialty Societies and Academic Medical Centers

While the various physician specialty societies and academic medical centers may collaborate with and make recommendations during this process, through the provision of appropriate reviewers, input received does not represent an endorsement or position statement by the physician specialty societies or academic medical centers, unless otherwise noted.

2011 Input

In response to requests, input was received from 3 physician specialty societies and 3 academic medical centers while this policy was under review in 2011. Input was solicited particularly for the use of HCT in MCL and peripheral T-cell lymphoma. There was a uniform agreement for the use of autologous HCT to consolidate the first remission in MCL. There was a general agreement for the use of allogeneic HCT as salvage therapy for MCL, with less agreement on the use of autologous HCT in the salvage setting. For peripheral T-cell lymphoma, there was general agreement on the use of autologous HCT to consolidate a complete remission in high-risk patients and the salvage setting. Input was split on the use of allogeneic HCT to consolidate a first complete remission or as salvage therapy, but there was more support to consider it medically necessary in both settings.

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2009 Input

In response to requests, input was received from 1 physician specialty society and 1 academic medical center while this policy was under review in 2009. There was general agreement with the policy statements. Both reviewers agreed that allogeneic HCT with reduced-intensity conditioning should be considered medically necessary in patients with non-Hodgkin lymphoma who do not qualify for a myeloablative allogeneic HCT. One reviewer responded on the medical necessity of HCT in patients with MCL in the first remission and recently published literature supported this. There was conflicting input on whether HCT should be considered investigational for peripheral T-cell lymphoma. Also, the 1 reviewer commented that with the increasing use of rituximab and its success in improving patient outcomes, the role of HCT in consolidating first complete response in high-risk patients is coming into question.

Practice Guidelines and Position Statements

National Comprehensive Cancer Network

Current National Comprehensive Cancer Network guidelines on B-cell lymphomas (v.6.2019) include the following recommendations:

- For follicular lymphoma, marginal zone lymphomas, and mantle cell lymphoma, recommend allogeneic HCT as second-line consolidation therapy.
- For DLBCL, “[a]llogeneic HCT should be considered in selected patients with mobilization failures and persistent bone marrow involvement or lack of adequate response to second-line therapy, though patients should be in CR or near CR at the time of transplant.”
- For Burkitt lymphoma, allogeneic HCT is an option for selected patients to achieve a complete or partial response to second-line therapy.

National Comprehensive Cancer Network guidelines on T-cell lymphomas (v.2.2019) include the following recommendations:

“Second-line systematic therapy followed by consolidation with HDT [high-dose therapy]/ASCR [autologous stem cell rescue] or allogeneic HCT for those with a CR [complete response] or PR [partial response] is recommended for patients who are candidates for transplant.”

“Allogeneic HCT should be considered for patients with acute or lymphoma [ATLL] subtype, if donor is available.”

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“In patients with acute or lymphoma subtypes who achieve a response to second-therapy, allogeneic HSCT should be considered if a donor is available.”

“In patients [with T-PLL] who achieve a CR or PR following initial therapy, consolidation with allogeneic HCT should be considered. Autologous HCT may be considered, if a donor is not available and if the patient is not physically fit enough to undergo allogeneic HCT.”

U.S. Preventive Services Task Force Recommendations

Not applicable.

Medicare National Coverage

Medicare has the following national coverage determination for the use of autologous cell transplantation for Hodgkin and non-Hodgkin lymphomas.

“a) Effective 1989, AuSCT [autologous stem cell transplantation] is considered reasonable and necessary ... for the following conditions and is covered under Medicare for patients with:

1. Acute leukemia in remission who have a high probability of relapse and who have no HLA-matched;
2. Resistant non-Hodgkin’s lymphomas or those presenting with poor prognostic features following an initial response;
3. Recurrent or refractory neuroblastoma; or,
4. Advanced Hodgkin’s disease who have failed conventional therapy and have no HLA-matched donor.

b) Effective ... 2000, single AuSCT is only covered for Durie-Salmon Stage II or III patients that fit the following requirements:

- Newly diagnosed or responsive multiple myeloma. This includes those patients with previously untreated disease, those with at least a partial response to prior chemotherapy (defined as a 50% decrease either in measurable paraprotein [serum and/or urine] or in bone marrow infiltration, sustained for at least 1 month), and those in responsive relapse; and
- Adequate cardiac, renal, pulmonary, and hepatic function.

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c) Effective ... 2005, when recognized clinical risk factors are employed to select patients for transplantation, high dose melphalan (HDM) together with AuSCT is reasonable and necessary for Medicare beneficiaries of any age group with primary amyloid light chain (AL) amyloidosis who meet the following criteria:

- Amyloid deposition in 2 or fewer organs; and,
- Cardiac left ventricular ejection fraction (EF) greater than 45%.”

Ongoing and Unpublished Clinical Trials

Some currently unpublished phase 3 trials that might influence this review are listed in National Cancer Institute’s Physician Data Query database.

Other currently unpublished trials that might influence this review are listed in Table 1.

Table 1. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
<i>Ongoing</i>			
NCT01811368	Use of Zevalin to Enhance the Efficacy of Non-Myeloablative Allogeneic Transplantation in Patients With Relapsed or Refractory CD20+ Non-Hodgkin’s Lymphoma	20	Jun 2020
NCT01908777	A Phase 2 Multicenter Study of High Dose Chemotherapy With Autologous Stem Cell Transplant Followed by Maintenance Therapy With Romidepsin for the Treatment of TCell Non-Hodgkin Lymphoma	34	Jul 2020
NCT02859402	Allogeneic Stem Cell Transplantation With 3-days Busulfan Plus Fludarabine as Conditioning in Patients With Relapsed or Refractory T-, NK/T-cell Lymphomas	34	Dec 2021

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NCT No.	Trial Name	Planned Enrollment	Completion Date
NCT03583424	A Phase I/II Trial of Venetoclax and BEAM Conditioning Followed by Autologous Stem Cell Transplantation for Patients With Primary Refractory Non-Hodgkin Lymphoma	18	Dec 2021
<i>Unpublished</i>			
NCT00802113	Sequential Myeloablative Stem Cell Transplantation and Reduced Intensity Allogeneic Stem Cell Transplantation in Patients With Refractory or Recurrent Non-Hodgkin's Lymphoma and Hodgkin's Disease	30	Oct 2014 (results posted on clinicaltrials.gov; summarized in Indication 3)
NCT01296256	Bendamustine, Cytarabine, Etoposide and Melphalan as Conditioning for Autologous Stem Cell Transplant in Patients With Aggressive Non-Hodgkin's Lymphoma	60	Nov 2015 (updated Feb 2016)

NCT: national clinical trial.

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- 12/06/2001 Medical Policy Committee review
- 03/25/2002 Managed Care Advisory Council approval
- 06/24/2002 Format revision. No substance change to policy
- 05/07/2004 Medical Director Review
- 05/18/2004 Medical Policy Committee review. Format revision. High-Dose Chemotherapy and Hematopoietic Stem-Cell Support for Non-Hodgkin’s Lymphoma policy developed separately from current HDC with Hematopoietic Stem-cell Support policy. No substance change to policy
- 06/28/2004 Managed Care Advisory Council approval
- 08/03/2005 Medical Director review
- 08/16/2005 Medical Policy Committee review. Format revision. Appendix A added Coverage eligibility unchanged
- 08/24/2005 Managed Care Advisory Council approval
- 07/07/2006 Format revision including addition of FDA and or other governmental regulatory approval and rationale/source. Coverage eligibility unchanged.
- 08/02/2006 Medical Director review
- 08/09/2006 Medical Policy Committee approval. Background and rationale/source updated to reflect current literature review.
- 07/10/2007 Medical Director review
- 07/18/2007 Medical Policy Committee approval. Coverage eligibility unchanged.
- 07/02/2008 Medical Director review
- 07/16/2008 Medical Policy Committee review. Older WHO/REAL and IWF classification schemes replaced by updated WHO/REAL classification and Ann Arbor staging schemes. Minor, nonsubstantive wording changes made to the Policy statements to de-emphasize the older classification systems; “peripheral T-cell lymphoma (PTCL) at any stage of disease” added as investigational indication. Information

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	about non-myeloablative (RIC) regimens added. “High-Dose Chemotherapy” removed from policy title.
07/02/2009	Medical Director review
07/22/2009	Medical Policy Committee review. Policy statement revised to indicate that autologous SCT may be considered medically necessary in some cases of mantle cell lymphoma and that reduced-intensity chemotherapy allogeneic SCT may be medically necessary under specific conditions.
07/01/2010	Medical Policy Committee approval
07/21/2010	Medical Policy Implementation Committee approval. No change to coverage.
08/04/2011	Medical Policy Committee approval
08/17/2011	Medical Policy Implementation Committee approval. Policy statements revised to specifically break out mantle cell lymphoma (investigational statements added for autologous as salvage therapy and allogeneic to consolidate a first remission and medically necessary statement added for allogeneic as salvage therapy) and peripheral T-cell lymphoma (added statements as medically necessary for autologous to consolidate first remission in specific situations and autologous and allogeneic as salvage therapy, and as investigational regarding allogeneic HSCT to consolidate a first complete remission).
08/02/2012	Medical Policy Committee review
08/15/2012	Medical Policy Implementation Committee approval. Coverage eligibility statement clarification that peripheral T-cell lymphomas encompass mature T-cell and NK-cell neoplasms.
03/04/2013	Coding updated
08/01/2013	Medical Policy Committee review
08/21/2013	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
09/04/2014	Medical Policy Committee review
09/17/2014	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
08/03/2015	Coding update: ICD10 Diagnosis code section added; ICD9 Procedure code section removed.
09/03/2015	Medical Policy Committee review
09/23/2015	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.

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- 10/06/2016 Medical Policy Committee review
- 10/19/2016 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
- 01/01/2017 Coding update: Removing ICD-9 Diagnosis Codes
- 10/05/2017 Medical Policy Committee review
- 10/18/2017 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
- 10/04/2018 Medical Policy Committee review
- 10/17/2018 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
- 10/03/2019 Medical Policy Committee review
- 10/09/2019 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
- 10/01/2020 Medical Policy Committee review
- 10/07/2020 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.

Next Scheduled Review Date: 10/2021

Coding

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Code Type	Code
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HCPCS	S2140, S2142, S2150
ICD-10 Diagnosis	C82.00-C82.99, C83.00-C83.99, C84.40-C84.99, C84.A0-C84.A9, C84.Z0-C84.Z9, C85.10-C85.99, C86.0-C86.66, C88.4

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

- A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
- B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
 - 1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
 - 2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or

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Louisiana

Hematopoietic Cell Transplantation for Non-Hodgkin Lymphomas

Policy # 00062

Original Effective Date: 01/28/2002

Current Effective Date: 11/09/2020

3. Reference to federal regulations.

****Medically Necessary (or “Medical Necessity”)** - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

- A. In accordance with nationally accepted standards of medical practice;
- B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and
- C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

For these purposes, “nationally accepted standards of medical practice” means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

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NOTICE: If the Patient’s health insurance contract contains language that differs from the BCBSLA Medical Policy definition noted above, the definition in the health insurance contract will be relied upon for specific coverage determinations.

NOTICE: Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.

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