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Subject: Allogeneic Hematopoietic Cell Transplantation

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DESCRIPTION:

Hematopoietic Cell Transplantation

Hematopoietic cell transplantation (HCT) refers to the infusion of hematopoietic stem cells to restore bone marrow function in individuals with cancer who receive bone-marrow-toxic doses of drugs with or without whole-body radiotherapy. Hematopoietic stem cells may be obtained from the transplant recipient (autologous HCT) or from a donor (allogeneic (allo-HCT)). They can be harvested from bone marrow, peripheral blood, or umbilical cord blood. Although 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.

Allogeneic HCT

Immunologic compatibility between donor and recipient is a critical factor for achieving a good outcome of allo-HCT. Compatibility is established by typing human leukocyte antigen (HLA) using cellular, serologic, or molecular techniques. HLA refers to the tissue type expressed at the HLA-A, -B, and -DR loci on each arm of chromosome 6. Depending on the disease being treated, an acceptable donor will match the recipient at all or most of the HLA loci. The conventional (“classical”) practice of allo-HCT involves administration of cytotoxic agents with or without total body irradiation at doses sufficient to destroy endogenous hematopoietic capability in the recipient. The beneficial treatment effect in this procedure is due to a combination of initial eradication of malignant cells and the subsequent graft-versus-malignancy effect that develops after engraftment of allogeneic stem cells within the recipient’s bone marrow space. While the slower graft-versus-malignancy effect is considered to be the potentially curative component, it may be overwhelmed by extant disease without the use of pretransplant conditioning. However, intense conditioning regimens are limited to recipients who are sufficiently fit

medically to tolerate substantial adverse events that include pre-engraftment opportunistic infections secondary to loss of endogenous bone marrow function, and organ damage and failure caused by the cytotoxic drugs. Furthermore, in any allo-HCT, immune suppressant drugs are required to minimize graft rejection and graft-versus-host disease, which also increases susceptibility to opportunistic infections. Reduced-intensity conditioning (RIC) refers to the pretransplant use of lower doses or less intense regimens of cytotoxic drugs or radiation than are used in conventional full-dose myeloablative conditioning treatments. The goal of RIC is to reduce disease burden and to minimize as much as possible treatment-related morbidity and nonrelapse mortality in the period during which the beneficial graft-versus-malignancy effect of allogeneic transplantation develops. Although the definition of RIC remains variable with numerous versions employed, all seek to balance the competing effects of nonrelapse mortality and relapse due to residual disease. RIC regimens can be viewed as a continuum in effects, from nearly totally myeloablative to minimally myeloablative with lymphoablation, with intensity tailored to specific diseases and recipient condition. Recipients who undergo RIC with allo-HCT initially demonstrate donor cell engraftment and bone marrow mixed chimerism. Most will subsequently convert to full-donor chimerism, which may be supplemented with donor lymphocyte infusions to eradicate residual malignant cells.

POSITION STATEMENT:

Certificate of Medical Necessity

Submit a completed Certificate of Medical Necessity (CMN) along with your request to expedite the medical review process.

1. Click the link Bone Marrow/Stem Cell Transplant under Certificates of Medical Necessity in the side navigation of this page to access the form.
2. Complete all fields on the form thoroughly.
3. Print and submit a copy of the form with your request.

Note: Florida Blue regularly updates CMNs. Ensure you are using the most current copy of a CMN before submitting to Florida Blue.

In accordance with **Chapter 59-B of the Florida Administrative Code [(1) – (6)]:multiple**

1. Upon the recommendation of the Bone Marrow Transplant Panel, each of the following procedures meets a minimum level of evidence based on high quality systematic reviews of case control or cohort studies, high quality case-control or cohort studies with a very low risk of confounding bias, or chance, and a high probability that the relationship is causal, and is considered accepted within the appropriate oncological specialty and not experimental for the purposes of Section 627.4236, F.S.

Allogeneic hematopoietic cell transplantation is covered when performed for one of the following indications:

- Acute myelogenous [leukemia](#)
- Myeloid sarcoma

- Chronic myelogenous leukemia
- Acute lymphoblastic leukemia
- Chronic [lymphocytic leukemia](#)
- Non-Hodgkin's [lymphoma](#)
- [Myelodysplastic syndrome](#)
- Hodgkin's lymphoma after autologous stem cell collection failure or relapsed after autologous transplant, but not progressing on salvage chemotherapy
- Severe or very severe aplastic anemia, from HLA-compatible siblings
- Acquired or genetic severe aplastic anemia unresponsive to immunosuppression
- Sickle cell anemia, thalassemia, and other severe red cell disorders
- Severe combined immune deficiency disorder, and other severe immune deficiency disorders

In cases where treatment for any of the above conditions includes a clinical trial that conforms to subsection (6) (below), routine care costs associated with the bone marrow transplant will be covered.

2. Each of the following procedures is considered accepted within the appropriate oncological specialty and not experimental for the purposes of section 627.4236, F.S., provided that the bone marrow transplantation procedure is performed in the context of a well-designed clinical treatment trial as described in subsection (6). Routine care costs associated with the bone marrow transplant will be covered for the following procedures:
 - Multiple myeloma and other plasma cell dyscrasias (e.g., Waldenstrom's, amyloid)
 - Renal cell carcinoma
 - Sickle cell anemia, thalassemia and other severe red cell disorders
3. The following rare diseases, where there are no existing clinical trials available, are covered for bone marrow transplant at the Blood and Marrow Transplant Clinical Trials Network (BMT CNT) core or non-core facilities when deemed medically necessary:
 - Myelofibrosis
 - Chronic myelomonocytic leukemia (CMML)
 - Paroxysmal nocturnal hemoglobinuria (PNH)
 - POEMS syndrome
4. Transplants from living related donors, incompatible for HLA-A, -B, and -DRB1 loci, are covered for bone marrow transplant at BMT CTN core or non-core medical facilities.
5. Any bone marrow transplant performed outside of a clinical trial will be covered when all the following criteria are met:
 - The plan of care follows a clinical trial protocol that meets the requirements of subsection (5);
 - Patient cannot be enrolled in the proposed clinical trial;
 - Bone marrow transplant treatment is medically necessary;
 - Patient is an appropriate candidate for bone marrow transplant; and

- Treatment center is part of the Blood and Marrow Transplant Clinical Trials Network (BMT CNT) as a core or non-core center.
6. A well-designed and conducted clinical treatment trial is one which includes an IRB-approved written protocol. At a minimum, such protocol shall have specific criteria for evaluating the effect of treatment with defined endpoints that are precise, meaningful, and reliable and which allow valid conclusions to be drawn about therapeutic efficacy and safety. Protocols should include an adequate statistical section describing the method of randomization and stratification, if any, expected outcome parameters relating to response rates, time to progression, survival times and other relevant information. Such clinical treatment trials shall be consistent with protocols reviewed and approved by the National Cancer Institute for scientific merit.

Allogeneic hematopoietic cell transplantation also **meets the definition of medical necessity** when performed for one of the following indications (in addition to any mandated coverage in subsections 1-6 above):

- **Small lymphocytic lymphoma**
 - Allogeneic transplant in individuals with markers of poor-risk disease [Advanced Rai or Binet stage; or as defined by NCCN guidelines: DNA sequencing with mutated TP53 or $\leq 2\%$ immunoglobulin heavy-chain variable (IGHV) mutation; interphase cytogenetics with del17p or deletion of 11q (del11q); or complex karyotype (≥ 3 unrelated chromosome abnormalities in more than 1 cell on karyotype)]
- **Hodgkin lymphoma** (in addition to subsection (1) above):
 - Allogeneic transplant for primary refractory or relapsed Hodgkin lymphoma
- **Multiple myeloma** (in addition to subsection (2) above):
 - Tandem transplantation with an initial round of autologous transplant, followed by a non-marrow-ablative conditioning regimen and allogeneic transplant (ie, reduced-intensity conditioning transplant) to treat newly diagnosed multiple myeloma
- **Myeloproliferative neoplasms (chronic myeloid leukemia; polycythemia vera; essential thrombocytopenia; primary myelofibrosis; chronic neutrophilic leukemia, chronic eosinophilic leukemia not otherwise specified; myeloproliferative neoplasm unclassifiable):**
 - Myeloablative allogeneic transplant, **OR**
 - Reduced intensity conditioning allogeneic transplant in those who are at high risk of intolerance to a myeloablative conditioning regimen (e.g., cytopenias, transfusion dependence, increasing blast percentage over 5%, or age 60-65 years)

It should be noted that there are non-malignant diseases that are genetic disorders or that result in bone marrow failure or lead to immunodeficiency syndromes for which bone marrow transplantation may be appropriate. While these non-malignant diseases are not described in the preceding lists, there are generally accepted and appropriate indications for bone marrow transplantation in these cases. In addition, there are malignant diseases that are uncommon in their occurrence that also are not included in the above lists for which the appropriateness of bone marrow transplantation may be determined on a case by case basis. Examples of other indications for which allogeneic hematopoietic cell transplantation may be indicated include, but are not limited to the following:

- Absent or defective T cell function (e.g., severe combined immunodeficiency (SCID), Wiskott-Aldrich syndrome, X-linked lymphoproliferative syndrome)
- Absent or defective natural killer function (e.g., Chediak-Higashi syndrome)
- Absent or defective neutrophil function (e.g., Kostmann syndrome, chronic granulomatous disease, leukocyte adhesion defect)
- Aplastic anemia (including hereditary forms, such as Fanconi anemia, dyskeratosis congenita, Shwachman-Diamond, Diamond Blackfan) and acquired anemia (e.g., secondary to drug or toxin exposure) (in addition to coverage mandated in subsection (1) above)
- Infantile malignant osteopetrosis (Albers-Schonberg disease or marble bone disease)
- Lysosomal and peroxisomal storage disorders, except for Hunter, Sanfilippo, and Morquio syndromes

Allogeneic hematopoietic cell transplantation is considered **experimental or investigational** for the following indications:

- Advanced stage epithelial ovarian cancer
- Autoimmune diseases such as multiple sclerosis, systemic lupus erythematosus, juvenile idiopathic and rheumatoid arthritis, chronic inflammatory demyelinating polyneuropathy, type I diabetes mellitus
- Solid tumors in adults [e.g., lung, colon, rectal, pancreas, stomach, esophageal, gallbladder, bile duct, renal cell cancer (except as noted in subsection (2) above), cervical, uterine, fallopian tube, prostate, nasopharyngeal, paranasal sinus, neuroendocrine, soft tissue sarcomas, thyroid, thymus, tumors of unknown primary origin, malignant melanoma]
- Pediatric solid tumors (e.g., neuroblastoma, Ewing sarcoma/Ewing sarcoma family of tumors, Wilms tumor, rhabdomyosarcoma, osteosarcoma, retinoblastoma)
- Ependymoma
- Primary systemic amyloidosis (except as noted in subsection (2) above for plasma cell dyscrasias)
- Germ cell tumors [e.g., seminomas, embryonal cell tumor, yolk sac tumor, teratomas, dysgerminomas and nondysgerminomas (such as germ cell tumor of ovarian origin), immature teratomas, polyembryoma, mixed germ cell tumors], including but not limited to its use as therapy after prior failed autologous transplant
- Embryonal tumors of the CNS [e.g., medulloblastoma, medulloepithelioma, supratentorial PNET (pineoblastoma, cerebral neuroblastoma, ganglioneuroblastoma), ependyoblastoma, atypical teratoid/rhabdoid tumor]
- Multiple myeloma, as initial therapy for newly diagnosed multiple myeloma, or as salvage therapy [except as noted in subsection (2) above]
- POEMS syndrome [except as noted in subsection (3) above]

Transplantation of cord blood stem cells from related or unrelated donors **meets the definition of medical necessity** in persons with an appropriate indication for allogeneic stem cell transplant.

Transplantation of cord blood stem cells from related or unrelated donors is considered **experimental or investigational** in all other situations.

Collection and storage of cord blood from a neonate **meets the definition of medical necessity** when an allogeneic transplant is imminent in an identified recipient with a diagnosis that is consistent with the possible need for allogeneic transplant.

Prophylactic collection and storage of cord blood from a neonate **does not meet the definition of medical necessity** when proposed for some unspecified future use as an allogeneic transplant in a related or unrelated donor.

BILLING/CODING INFORMATION:

CPT Coding:

38204	Management of recipient hematopoietic progenitor cell donor search and cell acquisition
38205	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; allogeneic
38207	Transplant preparation of hematopoietic progenitor cells; cryopreservation and storage
38208	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, without washing, per donor
38209	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, with washing, per donor
38210	Transplant preparation of hematopoietic progenitor cells; specific cell depletion within harvest, T-cell depletion
38211	Transplant preparation of hematopoietic progenitor cells; tumor cell depletion
38212	Transplant preparation of hematopoietic progenitor cells; red blood cell removal
38213	Transplant preparation of hematopoietic progenitor cells; platelet depletion
38214	Transplant preparation of hematopoietic progenitor cells; plasma (volume) depletion
38215	Transplant preparation of hematopoietic progenitor cells; cell concentration in plasma, mononuclear, buffy coat layer
38230	Bone marrow harvesting for transplantation, allogeneic
38240	Hematopoietic progenitor cell (HPC); allogeneic transplantation per donor
38242	Allogeneic lymphocyte infusions
38243	Hematopoietic progenitor cell (HPC); HPC boost

HCPCS Coding:

S2140	Cord blood harvesting for transplantation, allogeneic
S2142	Cord blood-derived stem-cell transplantation, allogeneic
S2150	Bone marrow or blood-derived stem cells (peripheral or umbilical), allogeneic or autologous, harvesting, transplantation, and related complications; including: pheresis and cell preparation/storage; marrow ablative therapy; drugs; supplies; hospitalization with outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services; and the number of day of pre- and post-transplant care in the global definition (non-covered)

LOINC Codes:

The following information may be required documentation to support medical necessity: physician history and physical including previous transplants, physician progress notes, treatment plan, radiology report(s), operative and/or pathology report(s), laboratory studies, medication history, type of transplant and reason for transplant, smoking/alcohol/drug abuse history, cardiac and pulmonary clearances, psychosocial assessment and all diagnostic testing.

Documentation Table	LOINC Codes	LOINC Time Frame Modifier Code	LOINC Time Frame Modifier Codes Narrative
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Attending physician visit note	18733-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Treatment plan	18776-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Radiology report	18726-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Physician operative report	28573-4	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Laboratory studies	26436-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Current, discharge, or administered medications	34483-8	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Transplant Rx	22043-4	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Transplant Rx at facility	21883-4	18805-2	Include all data of the selected type that represents observations made six

			months or fewer before starting date of service for the claim.
Transplant risk factors	44758-1	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Reason for transplant	44756-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
History of tobacco use	11366-2	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Alcohol abuse	42830-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Drug abuse	42831-8	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Cardiac screen assessment	39257-1	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Pulmonary consultation note	34103-2	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Psychosocial well-being, addressed in care plan	58168-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Diagnostic studies (non-lab)	27899-4	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.

REIMBURSEMENT INFORMATION:

Refer to section entitled [POSITION STATEMENT](#).

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage Products: The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Stem Cell Transplantation (110.23) located at cms.gov.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at [Coverage Protocol Exemption Request](#).

DEFINITIONS:

Cryopreservation: Preservation by subjection to extremely low temperatures.

Germ cell tumors: composed primarily of testicular neoplasms as well as ovarian and extragonadal germ cell tumors (no primary tumor in either testis or ovary). Germ cell tumors are classified by their histology, stage, prognosis, and response to chemotherapy. The most common testicular germ cell tumors are seminomas; all other histologic types are collectively referred to as nonseminomatous tumors. Nonseminomatous tumor types include embryonal cell tumor, yolk sac tumor, and teratomas. Malignant germ cell tumors of ovarian origin are classified as dysgerminomas or nondysgerminomas. Similarly, nondysgerminomas include immature teratomas, embryonal cell tumors, yolk sac tumor, polyembryoma, and mixed germ cell tumors.

Hematopoiesis: The formation of blood or of blood cells in the living body; also called hemopoiesis.

High-risk neuroblastoma: stage 4; aggressive tumors with a high likelihood of recurrence.

HLA: Special identifying markers that are on all cells of the body. HLA markers must match fairly closely between donor and patient, or rejection may occur. HLA identical means that two people have the same markers as each other (this can occur in twins or brothers and sisters).

Leukemia: A type of white blood cell that grows uncontrollably. Names are given depending on which type of white blood cell is abnormal. More sudden types include Acute Lymphoblastic Leukemia (ALL), Acute Non-lymphocytic Leukemia (ANLL), and Acute Myelocytic Leukemia (AML). More gradual types include Chronic Granulocytic Leukemia (CGL), Chronic Myelogenous Leukemia (CML) Chronic Myelomonocytic Leukemia (CMML), and Chronic Lymphocytic Leukemia (CLL).

Leukopheresis: A procedure by which the white blood cells are removed from a donor's blood which is then transfused back into the donor.

Lymphocytic leukemia: neoplasm of hematopoietic origin characterized by the accumulation of lymphocytes with a mature, generally well-differentiated morphology; these cells accumulate in blood, bone marrow, lymph nodes, and spleen.

Lymphoma: Tumor of the white blood cells called lymphocytes. Different types include Hodgkin's, (Follicular) Non-Hodgkin (HNL), and Small Lymphocytic Lymphoma (SLL).

Myelodysplastic syndrome (MDS): a heterogeneous group of clonal hematopoietic disorders with the potential to transform into acute myelocytic leukemia. MDS is classified into 5 subtypes: (1) refractory anemia; (2) refractory anemia with ringed sideroblasts; (3) refractory anemia with excess blasts; (4) refractory anemia with excess blasts in transformation; and (5) chronic myelomonocytic leukemia.

Myeloproliferative neoplasm: formerly known as chronic myeloproliferative disorder (CMPD); a subdivision of myeloid neoplasms that includes 4 classic disorders: chronic myeloid leukemia, polycythemia vera, essential thrombocytopenia, and primary myelofibrosis. The WHO classification also includes chronic neutrophilic leukemia, chronic eosinophilic leukemia/hypereosinophilic syndrome, mast cell disease, and MPN unclassifiable.

Tandem transplant: Two courses of high dose chemotherapy are given, opposed to the typical one course. Tandem transplants are typically administered at intervals of 2-6 months, depending on recovery from prior toxicity.

RELATED GUIDELINES:

[Autologous Hematopoietic Cell Transplantation, 02-38241-01](#)

OTHER:

Florida Statute 627.4236 Coverage for bone marrow transplant procedures. (excerpt)

(1) As used in this section, the term “bone marrow transplant” means human blood precursor cells administered to a patient to restore normal hematological and immunological functions following ablative or nonablative therapy with curative or life-prolonging intent. Human blood precursor cells may be obtained from the patient in an autologous transplant or from a medically acceptable related or unrelated donor, and may be derived from bone marrow, circulating blood, or a combination of bone marrow and circulating blood. If chemotherapy is an integral part of the treatment involving bone marrow transplantation, the term “bone marrow transplant” includes both the transplantation and the chemotherapy.

(2) An insurer or a health maintenance organization may not exclude coverage for bone marrow transplant procedures recommended by the referring physician and the treating physician under a policy exclusion for experimental, clinical investigative, educational, or similar procedures contained in any individual or group health insurance policy or health maintenance organization contract issued, amended, delivered, or renewed in this state that covers treatment for cancer, if the particular use of the bone marrow transplant procedure is determined to be accepted within the appropriate oncological specialty and not experimental pursuant to subsection.

(3) Covered bone marrow transplant procedures must include costs associated with the donor-patient to the same extent and limitations as costs associated with the insured, except the reasonable costs of searching for the donor may be limited to immediate family members and the National Bone Marrow Donor Program.

Florida Statute 765.523 Discrimination in access to anatomical gifts and organ transplants prohibited. (excerpt)

(d) "Organ transplant" means the transplantation or transfusion of a part of a human body into the body of another individual for the purpose of treating or curing a medical condition.

Florida Statute 627.64197 Coverage for organ transplants.—A health insurance policy issued, delivered, or renewed on or after July 1, 2020, in this state by an insurer which provides coverage for organ transplants on an expense-incurred basis may not deny coverage for an organ transplant solely on the basis of an insured's disability. This section may not be construed to require such insurer to provide coverage for an organ transplant that is not medically necessary. For purposes of this section, the term "organ transplant" has the same meaning as in s. 765.523.

Florida Statute 627.65736 Coverage for organ transplants.—A group health insurance policy delivered, issued, or renewed on or after July 1, 2020, in this state by an insurer or nonprofit health care services plan which provides coverage for organ transplants on an expense-incurred basis may not deny coverage for an organ transplant solely on the basis of an insured's disability. This section may not be construed to require such insurer or nonprofit health care service plan to provide coverage for an organ transplant that is not medically necessary. For purposes of this section, the term "organ transplant" has the same meaning as in s. 765.523.

Florida Statute 641.31075 Coverage for organ transplants.—A health maintenance contract issued or renewed on or after July 1, 2020, in this state by a health maintenance organization which provides coverage for organ transplants may not deny coverage for an organ transplant solely on the basis of a subscriber's disability. This section may not be construed to require such health maintenance organization to provide coverage for an organ transplant that is not medically necessary. For purposes of this section, the term "organ transplant" has the same meaning as in s. 765.523.

REFERENCES:

1. Agency for Health Care Administration; Rules of the Department of Health and Rehabilitative Services, Chapter 59-B, Florida Administrative Code, Section 59-B-12.001 (09/26/00; amended 07/07/13).
2. AHRQ Effective Healthcare Program. Comparative Effectiveness Review 48: Hematopoietic Stem-Cell Transplantation in the Pediatric Population. AHRQ Pub. No. 12-EHC018-1; February 2012).
3. AHRQ National Guideline Clearinghouse: Guidelines for the diagnosis and management of aplastic anaemia. NGC-7592 Marsh JC, Ball SE, Cavenagh J, Darbyshire P, Dokal I, Gordon-Smith EC, Keidan J, Laurie A, Martin A, Mercieca J, Killick SB, Stewart R, Yin JA, British Committee for Standards in Haematology. Guidelines for the diagnosis and management of aplastic anaemia. *Br J Haematol* 2009 Oct; 147(1):43-70.
4. AHRQ National Guideline Clearinghouse: Stem cell transplantation in adults: recommendations. NGC-7225 Imrie K, Rumble RB, Crump M, Advisory Panel on Bone Marrow and Stem Cell Transplantation, Hematology Disease Site Group. Stem cell transplantation in adults: recommendations. Toronto (ON): Cancer Care Ontario Program in Evidence-based Care; 01/30/09.
5. AHRQ: National Guideline Clearinghouse: The role of cytotoxic therapy with hematopoietic stem cell transplantation in the therapy of myelodysplastic syndromes. NGC-7415 Oliansky DM, Antin JH, Bennett JM, Deeg HJ, Engelhardt C, Heptinstall KV, de Lima M, Gore SD, Potts RG, Silverman LR, Jones RB, McCarthy PL Jr, Hahn T. The role of cytotoxic therapy with hematopoietic stem cell transplantation in the therapy of myelodysplastic syndromes: an evidence-based review. *Biol Blood Marrow Transplant* 2009 Feb; 15(2):137-72.

6. AHRQ National Guideline Clearinghouse: The role of cytotoxic therapy with hematopoietic stem cell transplantation in the therapy of acute myeloid leukemia in adults. NGC-7416. *Biol Blood Marrow Transplant* 2008 Feb;14(2):135-6.
7. AHRQ National Guideline Clearinghouse. The role of cytotoxic therapy with hematopoietic stem cell transplantation in the treatment of diffuse large B cell lymphoma: update of the 2001 evidence-based review. NGC-8491. American Society for Blood and Marrow Transplantation. *Biol Blood Marrow Transplant*. 2011 Jan;17(1): 18-9.
8. AHRQ National Guideline Clearinghouse. Clinical management of myelodysplastic syndromes: update of SIE, SIES, GITMO practice guidelines. NGC-9596. Santini V, Alessandrino PE, Angelucci E, Barosi G, Billio A, Di Maio M, Finelli C, Locatelli F, Marchetti M, Morra E, Musto P, Visani G, Tura S, Italian Society of Hematology. Clinical management of myelodysplastic syndromes: update of SIE, SIES, GITMO practice guidelines. *Leuk Res*. 2010 Dec;34(12):1576-88.
9. AHRQ National Guideline Clearinghouse. Stem cell transplantation in lymphoma. NGC-9685. Kouroukis CT, Rumble RB, Kuruvilla J, Crump M, Herst J, Hamm C. Stem cell transplantation in lymphoma. Toronto (ON): Cancer Care Ontario; 2012 Dec 13.
10. AHRQ National Guideline Clearinghouse. NGC"10925. Stem cell transplantation in the treatment of acute lymphoblastic leukemia. Toronto (ON): Cancer Care Ontario (CCO); 2016 Feb 1.
11. Anderson K. Role of Allotransplantation in Myeloma. *The Hematologist*, American Society of Hematology 2010.
12. Appelbaum JS, Milano F. Hematopoietic Stem Cell Transplantation in the Era of Engineered Cell Therapy. *Curr Hematol Malig Rep*. 2018;13(6):484–493. doi:10.1007/s11899-018-0476-4.
13. Ashfaq K, Yahaya I, Hyde C, Andronis L, Barton P, Bayliss S et al. Clinical effectiveness and cost-effectiveness of stem cell transplantation in the management of acute leukaemia: a systematic review. *Health Technol Assess* 2010;14(54).
14. Ayala E, Tomblyn M. Hematopoietic Cell Transplantation for Lymphomas. *Cancer Control* October 2011, Vol. 18, No. 4.
15. Aydin M, Dovern E, Leeftang MMG, et al. Haploidentical Allogeneic Stem Cell Transplantation in Sickle Cell Disease: A Systematic Review and Meta-Analysis. *Transplant Cell Ther*. 2021 Dec;27(12):1004.e1-1004.e8. doi: 10.1016/j.jtct.2021.09.009. Epub 2021 Sep 17.
16. Babushok D, Hexner E. Allogeneic transplantation for myelofibrosis: for whom, when, and what are the true benefits? *Curr Opin Hematol*. 2014 Mar;21(2):114-22.
17. Barrett D, Fish JD, Grupp SA. Autologous and Allogeneic Cellular Therapies for High-Risk Pediatric Solid Tumors. *Pediatr Clin North Am*. 2010 February ; 57(1): 47–66.
18. Bashir Q, Andersson B, De Padua Silva L, Rondon G, Chiattono A, Hosing C, Fernandez-Vina M, Giralt S, Champlin RE, De Lima, MJ. Treatment of acute myeloid leukemia (AML) in first remission (CR1) with unrelated donor (UD) allogeneic hematopoietic cell transplantation (HCT). U. 2010 ASCO Annual Meeting. Poster Discussion Session, Leukemia, Myelodysplasia, and Transplantation. *J Clin Oncol* 28:15s, 2010.
19. Bassan R, et al. Improved risk classification for risk-specific therapy based on the molecular study of minimal residual disease (MRD) in adult acute lymphoblastic leukemia (ALL). *BLOOD*, 30 APRIL 2009, VOLUME 113, NUMBER 18.
20. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.50 Placental and Umbilical Cord Blood as a Source of Stem Cells, 03/21 (Archived).
21. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.15 Hematopoietic Cell Transplantation for Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma, 02/24.
22. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.17 Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome, 02/24.

23. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.20 Hematopoietic Stem Cell Transplantation for Non-Hodgkin Lymphomas, 02/24.
24. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.21 Allogeneic Stem Cell Transplantation for Myelodysplastic Syndromes and Myeloproliferative Neoplasms, 02/24.
25. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.22 Allogeneic Hematopoietic Cell Transplantation for Genetic Diseases and Acquired Anemias, 03/21 (Archived).
26. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.23 Hematopoietic Cell Transplantation for Epithelial Ovarian Cancer, 02/24.
27. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.24 Hematopoietic Cell Transplantation for Miscellaneous Solid Tumors in Adults, 02/24.
28. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.25 Hematopoietic Cell Transplantation for Autoimmune Diseases, 02/24.
29. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.26 Hematopoietic Cell Transplantation for Acute Myeloid Leukemia, 02/24.
30. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.28 Hematopoietic Cell Transplantation for Central Nervous System Embryonal Tumors and Ependymoma, 02/24.
31. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.29 Hematopoietic Cell Transplantation for Hodgkin Lymphoma, 02/24.
32. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.30 Hematopoietic Cell Transplantation for Chronic Myelogenous Leukemia, 02/24.
33. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.32 Hematopoietic Cell Transplantation as a Treatment of Acute Lymphoblastic Leukemia, 02/24.
34. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.34 Hematopoietic Stem Cell Transplantation for Solid Tumors of Childhood, 02/24.
35. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.35 Hematopoietic Cell Transplantation in the Treatment of Germ Cell Tumors, 02/24.
36. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.42 Hematopoietic Stem Cell Transplantation for Primary Amyloidosis, 02/24.
37. Blue Cross Blue Shield Association Evidence Positioning System®. 8.01.54 Hematopoietic Stem Cell Transplantation for Waldenstrom Macroglobulinemia, 03/21 (Archived).
38. Blume KG. Hematopoietic Cell Transplantation: From a Curative Concept to Cure. The Hematologist, American Society of Hematology 2008.
39. Bregni M, Ciceri F, Peccator J. Allogeneic Stem Cell Transplantation for Metastatic Renal Cell Cancer (RCC). Journal of Cancer 2011, 2.
40. Brown, JR. Chronic Lymphocytic Leukemia: From Biology to Targeted Therapy. American Society of Hematology, Hematology 2011.
41. Castagna L, Sarina B et al. Allogeneic Stem Cell Transplantation Compared with Chemotherapy for Poor-Risk Hodgkin Lymphoma. Biol Blood Marrow Transplant 15: 432-438, 2009
42. Centers for Medicaid and Medicare Services (CMS). National Coverage Determination (NCD) STEM CELL TRANSPLANTATION (Formerly 110.8.1) 110.23 (01/27/16).
43. Chen R, Palmer JM, Popplewell L, Shen J, Smith E, Delioukina M, Kogut N, Rosenthal J, Forman S, Nademanee A. Reduced intensity allogeneic hematopoietic cell transplantation can induce durable remission in heavily pretreated relapsed Hodgkin lymphoma. Ann Hematol. 2011 Jul;90(7):803-8.

44. Chevallier P, Labopin M, Cornelissen J, Socié G, Rocha V, Mohty M. on behalf of the ALWP of EBMT. Allogeneic hematopoietic stem cell transplantation for isolated and leukemic myeloid sarcoma in adults: a report from the Acute Leukemia Working Party of the European group for Blood and Marrow Transplantation. *Haematologica* 2011; 96(9):1391-1394.
45. Chiesa R, Veys P. Reduced-intensity conditioning for allogeneic stem cell transplant in primary immune deficiencies. *Expert Rev. Clin. Immunol.* 8(3), 255–267 (2012).
46. ClinicalTrials.gov. NCT00020566: Combination Chemotherapy With or Without Peripheral Stem Cell Transplantation, Radiation Therapy, and/or Surgery in Treating Patients With Ewing's Sarcoma. Accessed at <http://www.clinicaltrials.gov>.
47. ClinicalTrials.gov. NCT00554788: Combination Chemotherapy, Autologous Stem Cell Transplant, and/or Radiation Therapy in Treating Young Patients With Extraocular Retinoblastoma. Accessed at <http://www.clinicaltrials.gov>.
48. ClinicalTrials.gov. NCT00567567: Comparing Two Different Myeloablation Therapies in Treating Young Patients Who Are Undergoing a Stem Cell Transplant for High-Risk Neuroblastoma. Accessed at <http://www.clinicaltrials.gov>.
49. ClinicalTrials.gov. NCT01969942: A Phase I Study to Examine the Toxicity of Allogeneic Stem Cell Transplantation for Relapsed or Therapy Refractory EWING SARCOMA and RHABDOMYOSARCOMA (ASCT). Accessed at <http://www.clinicaltrials.gov>.
50. Cornelissen JJ, van der Holt B. Myeloablative allogeneic versus autologous stem cell transplantation in adult patients with acute lymphoblastic leukemia in first remission: a prospective sibling donor versus no-donor comparison. *BLOOD*, 5 FEBRUARY 2009, VOLUME 113, NUMBER 6.
51. ECRI Institute Health Technology Forecast. Lymphoma (10/12/10).
52. Florida Administrative Code & Florida Administrative Register. Rule: 59B-12.001: Bone Marrow Transplantation. Rulemaking Authority 627.4236 FS. Law Implemented 627.4236 FS. History—New 11-9-95, Formerly 10D-127.001, Amended 9-26-00, 8-10-05, 7-7-13, 7-12-15, 2-4-19. Accessed at <https://www.flrules.org/gateway/ruleNo.asp?id=59B-12.001>.
53. Florida State Statute 627.4236 Coverage for bone marrow transplant procedures. Accessed at <http://www.flsenate.gov/>.
54. Florida State Statutes 765.523 – Discrimination in access to anatomical gifts and organ transplants prohibited; Florida Statute 627.64197 – Coverage for organ transplants; 627.65736 – Coverage for organ transplants; and 641.31075 – Coverage for organ transplants. Accessed at <http://www.flsenate.gov/>.
55. Gökbuget N, et al. Adult patients with acute lymphoblastic leukemia and molecular failure display a poor prognosis and are candidates for stem cell transplantation and targeted therapies. *BLOOD*, 30 AUGUST 2012, VOLUME 120, NUMBER 9.
56. Gribben JG. Role of Allogeneic Hematopoietic Stem-Cell Transplantation in Chronic Lymphocytic Leukemia. *Journal of Clinical Oncology*, Vol 26, No 30 (October 20), 2008.
57. Hahn T, et al. Significant Improvement in Survival After Allogeneic Hematopoietic Cell Transplantation During a Period of Significantly Increased Use, Older Recipient Age, and Use of Unrelated Donors. *J Clin Oncol* 31:2437-2449.
58. Hale GA, et al. ALLOGENEIC HEMATOPOIETIC CELL TRANSPLANTATION FOR NEUROBLASTOMA: THE CIBMTR EXPERIENCE. *Bone Marrow Transplant.* 2013 August ; 48(8): 1056–1064.
59. Hamadani M, Mohty M, Kharfan-Dabaja MA. Reduced-Intensity Conditioning Allogeneic Hematopoietic Cell Transplantation in Adults With Acute Myeloid Leukemia. *Cancer Control* October 2011, Vol. 18, No. 4.

60. Harada K, et al. Outcomes after allogeneic hematopoietic stem cell transplantation in patients with acute myeloid leukemia harboring t(7;11)(p15;p15). *Haematologica*. 2018 Feb;103(2):e69-e72.
61. Haslam K, et al. Allogeneic Hematopoietic Stem Cell Transplantation for a BCR-FGFR1 Myeloproliferative Neoplasm Presenting as Acute Lymphoblastic Leukemia. *Case Reports in Hematology* Volume 2012, Article ID 620967.
62. Ibikunle S, Grosso D, Gergis U. The two-step approach to allogeneic hematopoietic stem cell transplantation. *Front Immunol*. 2023 Sep 1;14:1237782. doi: 10.3389/fimmu.2023.1237782.
63. Illhardt T, Toporski J, Feuchtinger T, et al. Haploidentical Stem Cell Transplantation for Refractory/Relapsed Neuroblastoma. *Biol Blood Marrow Transplant*. 2018;24(5):1005–1012. doi:10.1016/j.bbmt.2017.12.805.
64. Iqbal N, Kumar L, Iqbal N. Update on Salvage Options in Relapsed/Refractory Hodgkin Lymphoma after Autotransplant. *ISRN Oncology* Volume 2014, Article ID 605691.
65. Kassim AA, Savani BM. Hematopoietic stem cell transplantation for acute myeloid leukemia: A review. *Hematol Oncol Stem Cell Ther*. 2017 Dec;10(4):245-251.
66. Krug U, Büchner T, Berdel WE, Müller-Tidow C. The treatment of elderly patients with acute myeloid leukemia. *Dtsch Arztebl Int* 2011; 108(51–52): 863–70.
67. Laport GG, Sandmaier BM, Storer BE, et al. Reduced-intensity conditioning followed by allogeneic hematopoietic cell transplantation for adult patients with myelodysplastic syndrome and myeloproliferative disorders. *Biol Blood Marrow Transplant*. 2008;14(2):246-255.
68. Lazarus HM, Advani AS. When, how, and what cell source for hematopoietic cell transplantation in first complete remission adult acute lymphoblastic leukemia? *Hematology* 2012.
69. Leleu X. Allogeneic Transplantation in Myeloma: Is It Worth a Price to Pay? *The Hematologist*, American Society of Hematology 2011.
70. Lim SN, et al. Allogeneic hematopoietic cell transplantation in adult patients with myelodysplastic/myeloproliferative neoplasms. *Blood Res* 2013;48:178-84.
71. Litzow MR, Tarima S. Allogeneic transplantation for therapy-related myelodysplastic syndrome and acute myeloid leukemia. *Blood*. 2010;115:1850-1857.
72. Locke FL, Artz AS, Godley LA, Odenike O, Larson RA, Van Besien K, Stock W. A prospective feasibility study of clofarabine (CLO) cyto-reduction prior to allogeneic stem cell transplant (HCT) conditioning for refractory leukemia and MDS. 2010 ASCO Annual Meeting. General Poster Session, Leukemia, Myelodysplasia, and Transplantation. *J Clin Oncol* 28:15s, 2010.
73. Lussana F, et al. Allogeneic hematopoietic stem cell transplantation in patients with polycythemia vera or essential thrombocythemia transformed to myelofibrosis or acute myeloid leukemia: a report from the MPN Subcommittee of the Chronic Malignancies Working Party of the European Group for Blood and Marrow Transplantation. *haematologica* | 2014; 99(5). (Accessed 09/30/15).
74. Mesa RA. Navigating the evolving paradigms in the diagnosis and treatment of myeloproliferative disorders. *Hematology (Am Soc Hematol Educ Program)* 2007; 2007:355-62.
75. Nassin ML, Nicolaou E, Gurbuxani S, Cohn SL, Cunningham JM, LaBelle JL. Immune Reconstitution Following Autologous Stem Cell Transplantation in Patients with High-Risk Neuroblastoma at the Time of Immunotherapy. *Biol Blood Marrow Transplant*. 2018;24(3):452–459.
76. National Cancer Institute. Chronic Myeloproliferative Disorders Treatment (PDQ®). Health Professional Version. Last Modified: 05/08/08.
77. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Acute Lymphoblastic Leukemia. Version 1.2013; Version 5.2017. Accessed at NCCN.org.
78. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Acute Myeloid Leukemia. Accessed at NCCN.org.

79. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Anal Carcinoma. Accessed at NCCN.org.
80. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Basal Cell and Squamous Cell Skin Cancers. Accessed at NCCN.org.
81. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: B-Cell Lymphomas. Accessed at NCCN.org.
82. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Bladder Cancer. Accessed at NCCN.org.
83. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Bone Cancer. Accessed at NCCN.org.
84. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Breast Cancer. Accessed at NCCN.org.
85. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Central Nervous System Cancers. Accessed at NCCN.org.
86. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Cervical Cancer. Accessed at NCCN.org.
87. National Comprehensive Cancer Network (NCCN). Clinical practice guidelines in oncology: Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma. Accessed at NCCN.org.
88. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Chronic Myelogenous Leukemia. Accessed at NCCN.org.
89. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Colon Cancer. Accessed at NCCN.org.
90. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Dermatofibrosarcoma Protuberans. Accessed at NCCN.org.
91. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Esophageal and Esophagogastric Junction Cancers. Accessed at NCCN.org.
92. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Gastric Cancer. Accessed at NCCN.org.
93. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Accessed at NCCN.org.
94. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Hepatobiliary Cancers. Accessed at NCCN.org.
95. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Hodgkin Lymphoma. Accessed at NCCN.org.
96. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Kidney Cancer. Accessed at NCCN.org.
97. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Malignant Pleural Mesothelioma. Accessed at NCCN.org.
98. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Melanoma. Accessed at NCCN.org.
99. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Merkel Cell Carcinoma. Accessed at NCCN.org.
100. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Multiple Myeloma. Accessed at NCCN.org.

101. National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology. Myelodysplastic Syndromes. Accessed at NCCN.org.
102. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Neuroendocrine Tumors. Accessed at NCCN.org.
103. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Non-Hodgkin's Lymphomas. Accessed at NCCN.org.
104. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Non-Small Cell Lung Cancer. Accessed at NCCN.org.
105. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Occult Primary. Accessed at NCCN.org.
106. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Ovarian Cancer. Accessed at NCCN.org.
107. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Pancreatic Adenocarcinoma. Accessed at NCCN.org.
108. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Penile Cancer. Accessed at NCCN.org.
109. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Prostate Cancer. Accessed at NCCN.org.
110. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Rectal Cancer. Accessed at NCCN.org.
111. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Soft Tissue Sarcoma. Accessed at NCCN.org.
112. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Small Cell Lung Cancer. Accessed at NCCN.org.
113. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Systemic Light Chain Amyloidosis. Accessed at NCCN.org.
114. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: T-Cell Lymphomas. Accessed at NCCN.org.
115. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Testicular Cancer. Accessed at NCCN.org.
116. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Thyomas and Thymic Carcinomas. Accessed at NCCN.org.
117. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Thyroid Carcinoma. Accessed at NCCN.org.
118. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Uterine Neoplasms. Accessed at NCCN.org.
119. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology. Waldenstrom's Macroglobulinemia / Lymphoplasmacytic Lymphoma. Accessed at NCCN.org.
120. National Guideline Clearinghouse. NGC:010925: Stem cell transplantation in the treatment of acute lymphoblastic leukemia. Cancer Care Ontario (CCO) Program in Evidence-based Care (PEBC) (02/01/16).
121. Nishihori T, Alsina M. Advances in the Autologous and Allogeneic Transplantation Strategies for Multiple Myeloma. Cancer Control October 2011, Vol. 18, No. 4.

122. Oyekunle A, Haferlach T, Kroger N, Klyuchnikov E, Zander AR, Schnittger S, Bacher U. Molecular Diagnostics, Targeted Therapy, and the Indication for Allogeneic StemCell Transplantation in Acute Lymphoblastic Leukemia. *Advances in Hematology Volume 2011*.
123. Petrovic A, Hale G. Clinical options after failure of allogeneic hematopoietic stem cell transplantation in patients with hematologic malignancies. *Expert Rev. Clin. Immunol.* 7(4), 515–527 (2011).
124. Radich J. Allogeneic Transplantation 2010: A Tale of Two Diseases. *The Hematologist, American Society of Hematology 2011*.
125. Reimer P. Impact of Autologous and Allogeneic StemCell Transplantation in Peripheral T-Cell Lymphomas. *Advances in Hematology Volume 2010*.
126. Ribera JM. Allogeneic stem cell transplantation for adult acute lymphoblastic leukemia: when and how. *Editorials and Perspectives: Haematologica* | 2011; 96(8).
127. Sarina B, Castagna L et al. Allogeneic Transplantation improves the over-all and progression-free survival of Hodgkin lymphoma patients relapsing after autologous transplantation: a retrospective study based on the time of HLA typing and donor availability. *Blood* 2010, 115(18): 3671-3677.
128. Sato Y, et al. I-131-Metaiodobenzylguanidine therapy with allogeneic cord blood stem cell transplantation for recurrent neuroblastoma. *Italian Journal of Pediatrics* 2012, 38:53.
129. Saussele S, Lauseker M. Allogeneic hematopoietic stem cell transplantation (allo SCT) for chronic myeloid leukemia in the imatinib era: evaluation of its impact within a subgroup of the randomized German CMLStudy IV. *BLOOD*, 11 MARCH 2010, VOLUME 115, NUMBER 10.
130. Schmitt M, et al. Conditioning with treosulfan and fludarabine for patients with refractory or relapsed non-Hodgkin lymphoma. *MOLECULAR AND CLINICAL ONCOLOGY* 2: 773-782.
131. Schmitz MF, et al. Secondary monoclonal gammopathy of undetermined significance after allogeneic stem cell transplantation in multiple myeloma. *haematol.*2014.111104.
132. Shen Y, Qi J, Chen J, et al. Allogeneic hematopoietic stem cell transplantation from non-sibling 10/10 HLA-matched related donors: a single-center experience. *Haematologica*. 2021 Nov 1;106(11):3017-3020. doi: 10.3324/haematol.2021.278933.
133. Snowden JA, et al. Evolution, trends, outcomes, and economics of hematopoietic stem cell transplantation in severe autoimmune diseases. *Blood Adv.* 2017 Dec 20;1(27):2742-2755.
134. Sorrow ML, Storer BE. Five-Year Follow-Up of Patients With Advanced Chronic Lymphocytic Leukemia Treated With Allogeneic Hematopoietic Cell Transplantation After Nonmyeloablative Conditioning. *J Clin Oncol* 26:4912-4920.
135. Sung KW. Treatment of high-risk neuroblastoma. *Korean J Pediatr* 2012;55(4):115-120.
136. Sureda A, Canals C et al. Allogeneic stem cell transplantation after reduced intensity conditioning in patients with relapsed or refractory Hodgkin's lymphoma. Results of the HDR-ALLO study – a prospective clinical trial by the Grupo Español de de Linfomas/Trasplante de Médula Osea (GEL/TAMO) and the Lymphoma Working Party of the European Group for Blood and Marrow Transplantation. *Haematologica*. 2012 Feb;97(2):310-7. doi: 10.3324/haematol.2011.045757. Epub 2011 Oct 11.
137. Sureda A, Canals C et al. Allogeneic stem cell transplantation after reduced intensity conditioning in patients with relapsed or refractory Hodgkin's lymphoma. Results of the HDR-ALLO study – a prospective clinical trial by the Grupo Español deLinfomas/ Trasplante de Médula Osea (GEL/TAMO) and the Lymphoma Working Party of the European Group for Blood and Marrow Transplantation. *Haematologica* 2012;97(2):310-317.
138. Thiel U, et al. No improvement of survival with reduced- versus high-intensity conditioning for allogeneic stem cell transplants in Ewing tumor patients. *Annals of Oncology* 22: 1614–1621, 2011.

139. Thomson KJ, Peggs KS et al. Superiority of reduced-intensity allogeneic transplantation over conventional treatment for relapse of Hodgkin's lymphoma following autologous stem cell transplantation. *Bone Marrow Transplantation* (2008) 41: 767-770.
140. UpToDate. Determining eligibility for allogeneic hematopoietic cell transplantation. 2024. Accessed at [uptodate.com](https://www.uptodate.com).
141. UpToDate. Early complications of hematopoietic cell transplantation. 2024. Accessed at [uptodate.com](https://www.uptodate.com).
142. UpToDate. Survival, quality-of-life, and late complications after hematopoietic cell transplantation in adults. 2024. Accessed at [uptodate.com](https://www.uptodate.com).
143. Vannucchi AM. Management of Myelofibrosis. American Society of Hematology, Hematology 2011.
144. Vo CD, Myhre AE, Abrahamsen IW, Remberger M, Mattsson J, Fløisand Y, Grønvold BCL, Tjønnfjord GE, Tvedt THA, Gedde-Dahl T. Allogeneic stem cell transplantation in adults 2015-21. *Tidsskr Nor Laegeforen*. 2023 Mar 13;143(4). English, Norwegian. doi: 10.4045/tidsskr.22.0521.
145. Wynn R. Stem Cell Transplantation in Inherited Metabolic Disorders. Hematopoietic Stem Cell Transplantation: Transplantation in benign Hematology. American Society of Hematology, Hematology 2011.
146. Yagi T, Ishikawa J. Successful Treatment of Duodenal Myeloid Sarcoma with Allogeneic Bone Marrow Transplantation and Additional Radiotherapy. *Intern Med* 51: 769-772, 2012.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 04/25/24.

GUIDELINE UPDATE INFORMATION:

08/15/02	Medical Coverage Guideline Reformatted and Revised to reflect criteria set forth in Chapter 59-B of the Florida Administrative Code.
02/15/03	2003 HCPCS coding update.
08/15/03	Reviewed – no changes in coverage statement.
01/01/04	Annual HCPCS coding update.
04/01/04	2nd Quarter 2004 HCPCS coding update.
09/15/04	Scheduled review; no change in coverage statement.
01/01/05	HCPCS coding update: revised descriptor for S2150.
09/15/05	Scheduled review; add renal carcinoma as a covered indication.
09/15/06	Scheduled review; coverage statement revised to be consistent with Florida Administrative Code 59B-12.
07/15/07	Scheduled review; reformatted guideline; updated references.
01/01/08	Annual HCPCS coding update: removed G0265, G0266, and G0267
09/15/08	Scheduled review; revise position statement. Add excerpt from Florida Statute. Update references.
06/15/09	Remove reference to family related donor with 5/6 or 6/6 match.
09/15/09	Scheduled review; update position statement, definitions, and references.
10/15/10	Scheduled review; added ICD-10 codes; no change in position statement. Updated references and reformatted guideline.

09/15/11	Scheduled review; added Medicare exception, updated references, formatting changes.
10/01/11	Revision; added ICD9 code 282.44.
01/01/12	Annual HCPCS coding update. Revised 38208, 38209 and 38230 descriptors.
04/01/12	Revision; updated ICD10 coding with new and revised codes.
05/15/12	Revision; guideline reformatted.
06/15/12	Scheduled review. Revised description section and position statement. Updated references and reformatted guideline.
01/01/13	Annual CPT coding update. Added 38243. Revised code descriptors for 38240 and 38242.
09/15/13	Revision; updated Florida Administrative Rule 59B-12.001 language.
10/15/13	Scheduled review. Revised description and position statement. Updated references.
11/15/14	Scheduled review. Revised position statement and definitions section. Updated references.
11/15/15	Scheduled review. Revised position statement (added additional Florida Administrative Code mandated coverage). Updated references.
01/01/18	Annual CPT/HCPCS coding update: deleted 38220.
04/15/18	Scheduled review. Revised criteria for Hodgkin's lymphoma. Revised Medicare Advantage program exception and definitions section. Updated references.
1/15/2019	Revision: updated language regarding prophylactic collection and storage of cord blood from a neonate.
05/15/20	Scheduled review. Revised MCG title, description, and position statement. Updated references.
07/01/20	Revision: added Florida statute language regarding discrimination in access to anatomical gifts and coverage of organ transplants. Updated references.
05/15/22	Scheduled review. Revised position statement and updated references.
05/25/23	Update to Program Exceptions section.
05/15/24	Scheduled review. Maintained position statement and updated references.