

Medicare Advantage Medical Policy



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BMT- Hematopoietic Cell Transplantation (HCT) for CNS Tumors, Embryonal Tumors, and Ependymoma – Medicare Advantage

Medicare Advantage Plan

☒ Medicare Plus BlueSM

☒ BCN AdvantageSM

UM Committee Approval Date: 9/17/2025

Effective Date: 10/17/2025

Description

High-dose chemotherapy with hematopoietic cell transplantation (HCT) has been investigated as a possible therapy in pediatric patients with brain tumors, particularly in those with high-risk disease. The use of HCT has allowed for a reduction in the dose of radiation needed to treat both average- and high-risk disease with a goal of preserving the quality of life and intellectual functioning.

Related Medical Coverage Policies

- BMT – Hematopoietic Cell Transplantation for Autoimmune Diseases
- BMT – Hematopoietic Cell Transplantation for Chronic Myeloid Leukemia
- BMT – Hematopoietic Cell Transplantation for Epithelial Ovarian Cancer
- BMT – Hematopoietic Cell Transplantation for Genetic Diseases and Acquired Anemias (Allogeneic)
- BMT – Hematopoietic Cell Transplantation for Germ-Cell Tumors
- BMT – Hematopoietic Cell Transplantation for Myelodysplastic Syndromes and Myeloproliferative Neoplasms
- BMT – Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome
- Orthopedic Applications of Stem-Cell Therapy (Including Allografts and Bone Substitutes used with Autologous Bone Marrow)

Policy Guidelines

Blue Cross Blue Shield of Michigan (BCBSM) and Blue Care Network of Michigan (BCN) adhere to guidance from the Centers for Medicare and Medicaid Services (CMS), including when performing organization determinations for Medicare Advantage plan members. CMS Medicare statutes, regulations, manuals, National Coverage Determinations (NCDs), Local

Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and other sub-regulatory guidance provide the clinical guidelines for coverage determinations, payment integrity functions, and all other uses by CMS regulations. When CMS Medicare guidance is silent, incomplete, or insufficient, CMS permits BCBSM/BCN to utilize “internal coverage criteria”, such as independent criteria, health plan policy research, LCD/LCAs outside the services area or research from independent medical research repositories (i.e., Hayes) for coverage policies 42 CFR § 422.101. BCBSM/BCN internal medical coverage policies are developed and based on current evidence in widely accepted treatment guidelines or clinical literature; in addition, they address how clinical benefits may or may not outweigh member harm.

Clinical review follows guidance provided in the BCBSM Medicare Advantage Coverage Determination Hierarchy policy, which may be found at <https://www.bcbsm.com/providers/mpradmin/> by entering the policy name.

Coverage Guidance

To ensure consistency with coverage guidance, the Medicare statutes, regulations, coverage manuals, NCD, LCD, and LCA should be reviewed and applied first. BCBSM/BCN internal coverage criteria should only be applied when CMS guidance is silent, incomplete, or insufficient for a code

Apart from durable medical equipment (DME), Medicare Administrative Contractor (MAC) jurisdiction for the purpose of clinical determination is based upon place of service. The place of service for laboratory testing is defined as the geographic location of the reference laboratory. Non-jurisdictional LCD/LCAs may not be utilized for a determination unless they have been specifically identified as internal coverage criteria by the policy. Alternatively, jurisdiction for DME MAC is determined by the member place of residence. Please see CMS Medicare Administrative Contractors (MAC) table for state MAC assignments below.

Code	Description	CMS Guidance	Additional Guidance
38206	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous	National Coverage Determinations 110.23 Stem Cell Transplant Local Coverage Determinations and Articles	BCBSM/BCN will follow CMS guidance as the primary source for coverage determinations. However, in instances where CMS guidance is silent, incomplete, or insufficient for a particular code, BCBSM/BCN internal coverage criteria will be applied to ensure consistent and informed decision-making.
38207	Transplant preparation of hematopoietic progenitor cells; cryopreservation and storage	WPS L36807, A57772 Moldx: Molecular Diagnostic Tests (MDT)* A57851 Moldx: Hla Testing For Transplant Histocompatibility*	In such cases, please refer to the relevant BCBSM/BCN policy for guidance: <i>BMT- Hematopoietic Cell Transplantation (HCT) for CNS Tumors, Embryonal Tumors, and Ependymoma</i>
38208	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, without washing, per donor	CGS L36021, A56973 Moldx: Molecular Diagnostic Tests (MDT)*	To access this policy, please visit the BCBS Michigan Medical Policy Router Search page at https://www.bcbsm.com/providers/mpradmin/ and enter the policy name in the search field.

Code	Description	CMS Guidance	Additional Guidance
38209	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, with washing, per donor	A56885 Moldx: Hla Testing For Transplant Histocompatibility* First Coast L34519, A57451 Molecular Pathology Procedures	
38210	Transplant preparation of hematopoietic progenitor cells; specific cell depletion within harvest, T-cell depletion	A58918 Molecular Pathology And Genetic Testing NGS L35000, A56199 Molecular Pathology Procedures	
38211	Transplant preparation of hematopoietic progenitor cells; tumor cell depletion	Noridian JE L35160, A57526 Moldx: Molecular Diagnostic Tests (MDT)*	
38212	Transplant preparation of hematopoietic progenitor cells; red blood cell removal	A57970 Moldx: Hla Testing For Transplant Histocompatibility*	
38213	Transplant preparation of hematopoietic progenitor cells; platelet depletion	Noridian JF L36256, A57527 Moldx: Molecular Diagnostic Tests (MDT)*	
38214	Transplant preparation of hematopoietic progenitor cells; plasma (volume) depletion	A57972 Moldx: Hla Testing For Transplant Histocompatibility* Novitas L35062, A56541 Biomarkers Overview	
38215	Transplant preparation of hematopoietic progenitor cells; cell concentration in plasma, mononuclear, or buffy coat layer	A56541 Molecular Pathology And Genetic Testing Palmetto L35025, A56853 Moldx: Molecular Diagnostic Tests (MDT)*	
38232	Bone marrow harvesting for transplantation; autologous		

Code	Description	CMS Guidance	Additional Guidance
38241	Bone marrow or blood-derived peripheral stem cell transplantation; autologous	A56859 Moldx: Hla Testing For Transplant Histocompatibility*	
**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 days of pre- and post-transplant care in the global definition		
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		

Code	Description	CMS Guidance	Additional Guidance
	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, or buffy coat layer		
38230	Allogeneic bone marrow harvesting for transplantation		

Code	Description	CMS Guidance	Additional Guidance
38240	Hematopoietic progenitor cell (HPC); allogeneic transplantation per donor.		
38242	Allogeneic donor lymphocyte infusions		
38243	Hematopoietic progenitor cell (HPC); HPC boost		
81267	Chimerism (engraftment) analysis, post stem cell transplantation specimen (e.g., hematopoietic stem cell), includes comparison to previously performed baseline analyses; without cell selection.		
81268	Chimerism (engraftment) analysis, post stem cell transplantation specimen (e.g., hematopoietic stem cell), includes comparison to previously performed baseline analyses; with cell selection.		
81370	HLA Class I and II typing, low resolution (e.g., antigen equivalents); HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1		
81371	HLA Class I and II typing, low resolution (e.g., antigen equivalents); HLA-A, -B, and -DRB1/3/4/5 (e.g., verification typing)		
81372	HLA Class I typing, low resolution (e.g., antigen equivalents); complete (i.e., HLA-A, -B, and -C)		

Code	Description	CMS Guidance	Additional Guidance
81373	HLA Class I typing, low resolution (e.g., antigen equivalents); 1 locus (e.g., HLA-A, -B, or -C), each		
81374	HLA Class I typing, low resolution;; (e.g., antigen equivalents (e.g., B*27), each		
81375	HLA Class II typing, low resolution, (e.g., antigen equivalent) for HLA-DRB1/3/4/5 and -DQB1		
81376	HLA Class II typing, low-resolution (e.g., antigen equivalent), one locus (e.g., HLA-DRB1/3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each.		
81377	HLA Class II typing, low-resolution (e.g., antigen equivalent), one antigen equivalent, each		
81378	HLA Class I and II typing, high resolution (i.e., alleles or allele groups), HLA-A, -B, -C, and -DRB1		
81379	HLA Class I typing, high resolution (i.e., alleles or allele groups); complete HLA-A, -B, and -C)		
81380	HLA Class I typing high resolution (i.e., alleles or allele groups); one locus (e.g., HLA-A, -B, or -C), each		
81381	HLA Class I typing high resolution (i.e., alleles or allele groups); one allele or allele group (e.g., B*57.01P), each		

Code	Description	CMS Guidance	Additional Guidance
81382	HLA Class II typing, high resolution (i.e., alleles or allele groups); 1 locus (e.g., HLA-DRB1, -DRB3, -DRB4, -DRB5, -DQB1, -DQA1, -DPB1, or -DPA1), each		
81383	HLA Class II typing, high resolution (i.e., alleles or allele groups); 1 allele or allele group (e.g., HLA-DQB1*06:02P), each		
86812	HLA typing; A, B, or C (e.g., A10, B7, B27), single antigen		
86813	HLA typing; A, B, or C, multiple antigens		
86816	HLA typing; DR/DQ, single antigen		
86817	HLA typing; DR/DQ, multiple antigens		
86821	HLA typing; lymphocyte culture, mixed (MLC)		
**S2140	Cord blood harvesting for transplantation, allogeneic		
**S2142	Cord blood-derived stem-cell transplantation, allogeneic		
**S2150	<i>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</i>		

Code	Description	CMS Guidance	Additional Guidance
	<i>outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services; and the number of days of pre- and post-transplant care in the global definition</i>		

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HCPCS® codes, descriptions and materials are copyrighted by Centers for Medicare and Medicaid Services (CMS).

* CMS MoIDX Program

The MoIDX Program, administered by Palmetto GBA, is a Medicare Molecular Diagnostic Program that aims to identify and establish coverage and reimbursement for molecular diagnostic tests. This program is implemented by several Medicare Administrative Contractors (MACs), including **WPS, CGS, Noridian, and Palmetto**.

The MoIDX Program evaluates genetic tests to determine their analytical and clinical validity (AV/CV) and clinical utility (CU), ensuring that each test meets Medicare criteria.

The program's coverage determinations are maintained in the DEX™ Diagnostic Exchange registry. Dex Diagnostic Exchange Registry Coverage Determinations:

1. Not Covered: Not covered tests in the Dex Registry have undergone a review of their clinical utility and analytical validity and have been determined to not meet the requirements for medical necessity under Section 1862(a)(1)(A) of the Social Security Act. As a result, they are not considered medically reasonable or necessary for Medicare coverage.
2. No Determinations: Tests that have not completed the required technical assessment (TA) review are, by default, also considered not medically reasonable or necessary for Medicare under Section 1862(a)(1)(A) until the review is completed. The MoIDX Program does not provide coverage for tests provided with dates of services prior to the effective date of approval.
3. Covered: Covered Tests in Dex Registry have completed the required TA review and have been determined to be medically reasonable and necessary for Medicare under Section 1862(a)(1)(A). However, coverage is not automatic and is subject to the following conditions:
 - a. The test must meet the applicable criteria outlined in NCDs, LCDs, and LCAs; and
 - b. The patient must exhibit signs or symptoms of a relevant disease or condition, making the test medically necessary for their care.

For specific coding and billing information on covered and excluded tests, please refer to the MoIDX website at <https://www.palmettogba.com/MoIDX>. This website provides up-to-date information on the program's coverage determinations and guidelines.

NOTE: Per § 2.3.3. of the Molecular Diagnostic Program [MoIDX®] Manual, the MoIDX Program does not provide coverage for tests that have not been reviewed and approved through the MoIDX process or for tests provided with dates of services prior to the effective date of approval. For additional information regarding what tests will fall into a Medicare benefit category or which tests are statutory excluded (e.g., predictive, prenatal, and carrier testing

and tests considered screening in the absence of clinical signs and symptoms of disease that are not specifically identified by the law) please refer to
<https://www.palmettogba.com/palmetto/moldxv2.nsf/DID/DPR5GEM991>

**** Status Indicator Code:** The National Physician Fee Schedule Relative Value File (NPF SRVF), which is published by Medicare, indicates HCPCS codes starting with “S” have been assigned a Status Indicator code of “I” - Not valid for Medicare purposes.

The above information is current as of the review date for this policy. However, the coverage issues and policies maintained by CMS are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document.

Please refer to the Medicare Coverage Database website at <https://www.cms.gov/medicare-coverage-database/search.aspx> for the most current applicable NCD, LCD, LCA, and CMS Online Manual System Transmittals.

CMS Medicare Administrative Contractors (MAC) Jurisdictions

Part A and Part B MAC Jurisdictions	
Wisconsin Physicians Service Insurance Corporation (WPS)	IA, IN, KS, MI, MO, NE
CGS Administrators, LLC	KY, OH
First Coast Service Options, Inc	FL, PR, US VI
National Government Services, Inc (NGS)	CT, IL, MA, ME, MN, NH, NY, RI, VT, WI,
Noridian Healthcare Solutions, LLC, Jurisdiction JE	CA, HI, NV, American Samoa, Guam, Northern Mariana Islands
Noridian Healthcare Solutions, LLC, Jurisdiction JF	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY
Novitas Solutions, Inc	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX,
Palmetto GBA	AL, GA, TN NC, SC, VA, WV
DME MAC Jurisdictions	
CGS Administrators, LLC, Jurisdictions JB and JC	AL, AR, CO, FL, GA, IL, IN, KY, LA, MI, MN, MS, NM, NC, OH, OK, Puerto Rico, SC, TN, TX, VA, Virgin Island, WI, WV
Noridian Healthcare Solutions, LLC, Jurisdictions JA and JD	AK, American Soamoa, AZ, CA, CT, DE, DC, Guam, HI, ID, IA, KS, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, NY, Northern Mariana Islands, OR, PA, RI, SD, UT, VT, WA, WY

Important Reminder

BCBSM and BCN follow CMS Medicare coverage guidance to limit coverage to items and services that are reasonable and necessary for the diagnosis or treatment of an illness or injury or to improve the functioning of a malformed body member. Medicare Advantage Medical Policies list the criteria BCBSM and BCN use to decide which medical services are considered “reasonable and necessary” when Medicare coverage rules are not fully developed, or as otherwise may permitted by CMS Medicare regulations. Individual member benefit plan documents, such as the Evidence of Coverage and Annual Notice of Change, as well as applicable laws govern benefit coverage, including any inclusion, exclusion, and/or other restrictions.

Medicare Advantage Medical policies are created when permitted by CMS Medicare regulations, reviewed regularly, and may be revised periodically. BCBSM/BCN Medical

Policies are proprietary and should not be copied or disseminated without the express, prior written approval of BCBSM. All providers are required to review applicable BCBSM reimbursement policies prior to claim submission and bill for covered services in accordance with those policies. Additionally, providers contracted with BCBSM or BCN's Medicare Advantage network(s) should review the provider manual for any additional claim submission requirements. Providers not contracted with BCBSM or BCN's Medicare Advantage network may be required to submit documentation to BCBSM, BCN, or its delegated entity supporting billed claims, including but not limited to applicable medical records.

Note: U.S. Food and Drug Administration (FDA) approval for a specific indication or the issuance of a CPT code is not sufficient for a procedure to be considered medically reasonable and necessary. Similarly, the presence of a procedure/device code or payment amount for the service in the Medicare fee schedule does not necessarily indicate coverage. If a service is deemed not reasonable and necessary, to treat illness or injury for any reason (including lack of safety and efficacy because it is an experimental procedure, etc.), the procedure is considered not covered.

Disclaimer: This medical policy is not an authorization, certification, explanation of benefits, or a contract for the services, devices, or drugs that is referenced in the medical policy. Medical policies do not constitute medical advice and do not guarantee any results or outcomes or guarantee payment. The medical policy is not intended to replace independent medical judgment for the treatment of individuals. Treating physicians and health care providers are solely responsible for determining what care to provide to their patients. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test, or procedure over another.

Pursuant to Section 1557 and Section 504, Blue Cross does not discriminate on the basis of race, color, national origin, age, disability, or sex (including sex characteristics, intersex traits; pregnancy or related conditions; sexual orientation; gender identity, and sex stereotypes). This includes our rules, benefit designs and medical policies.

BCBSM/BCN Medicare Advantage Policy History

Policy Effective Date	UM Committee Approval Date	Comments
08/17/2024	07/17/2024	Medicare Advantage policy established
10/17/2025	09/17/2025	MA policy foundational language updated. Adoption of JUMP policy updates.