Hematopoietic Cell Transplantation in the Treatment of Germ-Cell Tumors

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Approved By:	Highmark Health Options – Market Leadership
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Products:	Medicaid
Application:	All participating hospitals and providers
Page Number(s):	1 of 5

Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

Highmark Health Options may provide coverage under medical surgical benefits of the Company's Medicaid products for medically necessary hematopoietic cell transplantation in the treatment of germ-cell tumors.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness, or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

DEFINITIONS

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently services Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan Plus members.

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.

HCT – Involves the intravenous (IV) infusion of allogeneic (donor) or autologous stem cells to reestablish hematopoietic function in individuals whose bone marrow or immune system is damaged or defective. They can be harvested from bone marrow, peripheral blood, or umbilical cord blood and placenta shortly after delivery of neonates

PROCEDURES

1. A prior authorization is required.

2. Autologous HCT

   Single autologous HCT may be considered medically necessary as salvage therapy for germ-cell tumors in individuals with ANY of the following conditions:

   - Favorable prognostic factors that have failed a previous course of conventional-dose salvage chemotherapy
     - Note: Individuals with favorable prognostic factors include those with a testis or retroperitoneal primary site, a complete response to initial chemotherapy, low levels of serum markers, and low volume disease; or
   - Unfavorable prognostic factors as initial treatment of first relapse (i.e., without a course of conventional-dose salvage chemotherapy) and in patients with platinum-refractory disease
     - Note: Individuals with unfavorable prognostic factors are those with an incomplete response to initial therapy or relapsing mediastinal nonseminomatous germ-cell tumors.

   Tandem or sequential autologous HCT or transplant with high-dose chemotherapy may be considered medically necessary for the treatment of testicular tumors either as salvage therapy or with platinum-refractory disease.

   Autologous HCT as a component of first-line treatment in individuals with germ cell tumors is considered experimental/investigational and therefore noncovered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

   Autologous HCT not meeting the criteria as indicated in this policy is considered experimental/investigational and therefore noncovered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

   Allogeneic HCT to treat germ-cell tumors, including, but not limited to its use as therapy after prior failed autologous HCT is considered experimental/investigational and therefore noncovered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

3. Post-payment audit statement

   The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Highmark Health Options at any time pursuant to the terms of your provider agreement.

4. Place of service: inpatient/outpatient

   Experimental/investigational (E/I) services are not covered regardless of place of service.

   HCT for the treatment of germ-cell tumors is typically an outpatient procedure which is only eligible for coverage as an inpatient procedure in special circumstances, including, but not limited to, the presence of a comorbid condition that would require monitoring in a more controlled environment such as the inpatient setting.

CODING REQUIREMENTS

CPT codes	Description
38206	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous.
38240	Hematopoietic progenitor cell (HPC); allogeneic transplantation per donor.
38241	Hematopoietic progenitor cell (HPC); autologous transplantation.

DIAGNOSIS CODES COVERED FOR PROCEDURE CODES 38206 AND 38241

Codes						
C38.1	C38.2	C38.3	C48.0	C56.1	C56.2	C62.01
C62.02	C62.11	C62.12	C62.91	C62.92	C75.3	

REIMBURSEMENT

Participating facilities will be reimbursed per their Highmark Health Options contract.

POLICY SOURCES

National Comprehensive Cancer Network – 2021

Current National Comprehensive Cancer Network guidelines on testicular cancer (v.1.2022) state that second-line chemotherapy regimens for metastatic germ cell tumors include high-dose chemotherapy with stem cell support.

Current National Comprehensive Cancer Network guidelines on ovarian cancer (v.3.2021) state that chemotherapy plus stem cell transplant can be used as therapy for recurrent or persistent disease for malignant

American Society for Blood and Marrow Transplantation (ASBMT) – 2015

The guidelines by the ASBMT were published on indications for autologous and allogeneic HCT. Recommendations were intended to describe the current consensus on the use of HCT within and outside of the clinical trial setting. Recommendations are as follows:

- Pediatric Individuals
  - Autologous HCT for germ cell tumor, relapse or refractory, there is clinical evidence available and is standard of care.
  - Allogeneic HCT for germ cell tumor, relapse or refractory, is developmental.
- Adult Individuals
  - Autologous HCT for Germ cell tumor, relapse or refractory, there is clinical evidence available and is standard of care.
  - Allogeneic HCT for germ cell tumor, relapse or refractory, is not generally recommended.

References

Adra N, Abonour R, Althouse SK, Albany C, Hanna NH, et al. High-dose chemotherapy and autologous peripheral-blood stem-cell transplantation for relapsed metastatic germ cell tumors: the Indiana University experience. J Clin Oncol. 2017;35(10):1096-1102

Interqual® Level of Care Criteria 2019. Acute Care Adult. McKesson Health Solutions, LLC.

Majhail NS, Farnia SH, Carpenter PA, et al. Indications for autologous and allogeneic hematopoietic cell transplantation: Guidelines from the American Society for Blood and Marrow Transplantation. Biol Blood Marrow Transplant. 2015;21(11):1863-1869.

Adra N, Abonour R, Althouse SK, Albany C, Hanna NH, et al. High-dose chemotherapy and autologous peripheral-blood stem-cell transplantation for relapsed metastatic germ cell tumors: the Indiana University experience. J Clin Oncol. 2017;35(10):1096-1102.

Lee S, Yamauchi T, Kinoshita K, Imamur S, Kamiya K. High-dose chemotherapy with autologous stem cell transplantation following systemic chemotherapy, prophylactic intrathecal methotrexate, and radiotherapy prevents relapse and improves the outcome of advanced stage primary testicular lymphoma even with cardiac involvement. J Clin Exp Hematop. 2017;57(2):64-68.

Mousavi SA, Abedinzadeh N, Taj L, et all. Successful Outcome of Autologous Stem Cell Transplantation for Relapsed or Refractory Germ Cell Tumors. Int J Hematol-Oncol Stem Cell Res. 2018;12(3):191-195.

Oing C, Alsdorg W, vonAmsberg G, Oechsle K, Bokemeyer C. Platinum-refractory germ cell tumors: An update on current treatment options and developments. World J Urol. 2017; 35:1167-1175.

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Testicular Cancer. Version 1.2022.

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Ovarian Cancer. Version 1.2020.

Zschäbitz S, Distler FA, Krieger B, et al. Survival outcomes of patients with germ cell tumors treated with high-dose chemotherapy for refractory or relapsing disease. Oncotarget. 2018;9(32):22537-22545.

Ertürk İ, Yıldız B, Karadurmuş N, et al. Retrospective analysis of patients with relapsed or refractory germ cell tumors treated with autologous hematopoietic stem cell transplantation. Gulhane Med J. 2018;60(4):130-135.

Kilari D, D'Souza A, Fraser R, et al. Autologous Hematopoietic Stem Cell Transplantation for Male Germ Cell Tumors: Improved Outcomes Over 3 Decades. Biol Blood Marrow Transplant. 2019;25(6):1099-1106.

Fergadis E, Gavrielatou N, Skouteris N, Athanasopoulos A, Lianos E, Kosmas C. Myeloablative chemotherapy and autologous stem cell transplantation can lead to successful postengraftment mobilization of hematopoietic progenitors to support planned subsequent cycle(s) of high-dose chemotherapy and autografting in a patient with relapsed germ-cell tumor. Anticancer Drugs. 2019;30(2):205-208.

Hamid AA, Markt SC, Vicier C, McDermott K, Richardson P, Ho VT, Sweeney CJ. Autologous stem-cell transplantation outcomes for relapsed metastatic germ-cell tumors in the modern era. Clin Genitourin Cancer. 2019;17(1):58-64. e1.

POLICY UPDATE HISTORY

10/8/2021	Approved in Medical Policy Committee
09/28/2022	Annual review; approved in medical policy committee
10/2022	Approved in QI/UM