

Blue Cross Blue Shield of Massachusetts is an Independent Licensee of the Blue Cross and Blue Shield Association

Medical Policy

Hematopoietic Cell Transplantation for Epithelial Ovarian Cancer

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Policy Number: 204

BCBSA Reference Number: 8.01.23

NCD/LCD: NA

Related Policies

- Hematopoietic Cell Transplantation in the Treatment of Germ Cell Tumors, #247
- Hematopoietic Cell Transplantation for Miscellaneous Solid Tumors in Adults, #191

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Autologous and allogeneic hematopoietic cell transplantation are considered **INVESTIGATIONAL** to treat advanced stage epithelial ovarian cancer.

Prior Authorization Information

Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> if the procedure is performed inpatient.

Outpatient

• For services described in this policy, see below for situations where prior authorization might be required if the procedure is performed outpatient.

	Outpatient
Commercial Managed Care (HMO and POS)	This is not a covered service.
Commercial PPO and Indemnity	This is not a covered service.
Medicare HMO Blue SM	This is not a covered service.
Medicare PPO Blue SM	This is not a covered service.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

According to the policy statement above, the following CPT and HCPCS codes are considered investigational for the conditions listed for <u>Commercial Members: Managed Care (HMO and POS)</u>, <u>PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:</u>

CPT codes

CPT codes:	Code Description
38204	Management of recipient hematopoietic cell donor search and cell acquisition
38205	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; allogeneic
38206	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous
38208	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest without washing
38209	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, with washing
38210	Transplant preparation of hematopoietic progenitor cells; specific cell depletion with 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
38232	Bone marrow harvesting for transplantation; autologous
38240	Bone marrow or blood-derived peripheral stem-cell transplantation; allogeneic
38241	Bone marrow or blood-derived peripheral stem-cell transplantation; autologous

HCPCS Codes

HCPCS codes:	Code Description
S2140	Cord blood harvesting for transplantation; allogeneic
S2142	Cord blood derived stem-cell transplantation, allogeneic
S2150	Bone marrow or blood-derived peripheral stem-cell harvesting and transplantation, allogeneic or autologous, including pheresis, high-dose chemotherapy, and the number of days of post-transplant care in the global definition (including drugs; hospitalization; medical surgical, diagnostic and emergency services)

ICD-10 Procedure Codes

ICD-10-PCS procedure codes:	Code Description
30233G0	Transfusion of Autologous Bone Marrow into Peripheral Vein, Percutaneous Approach
30233X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach
30233Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach
30243G0	Transfusion of Autologous Bone Marrow into Central Vein, Percutaneous Approach

30243X0	Transfusion of Autologous Cord Blood Stem Cells into Central Vein, Percutaneous Approach
30243Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Vein,
3E03305	Percutaneous Approach Introduction of Other Antineoplastic into Peripheral Vein, Percutaneous Approach
3E04305	Introduction of Other Antineoplastic into Central Vein, Percutaneous Approach
3E05305	Introduction of Other Antineoplastic into Peripheral Artery, Percutaneous Approach
3E06305	Introduction of Other Antineoplastic into Central Artery, Percutaneous Approach

Description

Epithelial Ovarian Cancer

Several types of malignancies can arise in the ovary; epithelial carcinoma is the most common. Epithelial ovarian cancer is the fifth most common cause of cancer death in women. New cases and deaths from ovarian cancer in the United States for 2017 were estimated at 22440 and 14080, respectively. Most ovarian cancer patients present with widespread disease, and the National Cancer Institute Surveillance, Epidemiology and Results Program reported a 46.5% five-year survival for all cases between 2007 and 2013.

Treatment

Current management for advanced epithelial ovarian cancer is cytoreductive surgery with chemotherapy.^{3,} Approximately 75% of patients present with International Federation of Gynecology and Obstetrics stage III to IV ovarian cancer and are treated with paclitaxel plus a platinum analogue, the preferred regimen for the newly diagnosed advanced disease.^{4,5,} Use of platinum and taxanes has improved progression-free survival and overall survival in advanced disease to between 16 and 21 months and 32 and 57 months, respectively.^{4,} However, cancer recurs in most women, and they die of the disease because chemotherapy drug resistance leads to uncontrolled cancer growth.^{5,}

Hematopoietic Cell Transplantation

HCT is a procedure in which hematopoietic stem cells are infused to restore bone marrow function in cancer patients who receive bone-marrow-toxic doses of drugs with or without whole body radiotherapy. Bone marrow stem cells may be obtained from the transplant recipient (autologous HCT) or a donor (allogeneic HCT). They can be harvested from bone marrow, peripheral blood, or umbilical cord blood and placenta shortly after delivery of neonates. 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. Cord blood transplantation is discussed in detail in policy #285.

HCT is an established treatment for certain hematologic malignancies; however, its use in solid tumors in adults is largely experimental.

Summary

The use of hematopoietic cell transplantation (HCT) has been investigated to treat patients with epithelial ovarian cancer. Hematopoietic stem cells are infused to restore bone marrow function after cytotoxic doses of chemotherapeutic agents with or without whole body radiotherapy.

For individuals who have advanced-stage epithelial ovarian cancer who receive HCT, the evidence includes randomized trials and data from case series and registries. The relevant outcomes are overall survival, disease-specific survival, change in disease status, and treatment-related mortality and morbidity. Although some observational studies have reported longer survival in subsets of women with advanced epithelial ovarian cancer than in women treated with standard chemotherapy, none of the randomized trial evidence has shown a benefit from HCT in this population. Overall, the evidence has not shown that HCT improves health outcomes in treating epithelial ovarian cancer, including survival, compared with conventional standard doses of chemotherapy. The evidence is insufficient to determine the effects of the technology on health outcomes.

Policy History

Date	Action
10/2020	Clarified coding information
3/2020	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
3/2019	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
1/2019	Outpatient prior authorization is required for all commercial products including Medicare Advantage. Effective 1/1/2019.
6/2018	BCBSA National medical policy review. Policy statement revised to add "advanced stage" associated with epithelial ovarian cancer; intent of the policy is unchanged. Clarified coding information. Effective 6/1/2018.
3/2017	BCBSA National medical policy review. New references added. Title changed. 3/1/2017
3/2016	New references added from BCBSA National medical policy.
12/2014	New references added from BCBSA National medical policy.
6/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
2/2014	New references added from BCBSA National medical policy.
12/2012	Updated to add new CPT code 38243.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
9/2011	Reviewed - Medical Policy Group – Urology, Obstetrics and Gynecology. No changes to policy statements.
7/2011	Reviewed - Medical Policy Group – Hematology and Oncology. No changes to policy statements.
10/2010	Reviewed - Medical Policy Group – Obstetrics and Gynecology. No changes to policy statements.
9/2010	Reviewed - Medical Policy Group – Hematology and Oncology. No changes to policy statements.
8/1/2010	Medical Policy 204 effective 8/1/2010.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use

Managed Care Guidelines

Indemnity/PPO Guidelines

Clinical Exception Process

Medical Technology Assessment Guidelines

References

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- 2. National Cancer Institute, Surveillance Epidemiology and End Results Program. Cancer Stat Facts: Ovarian Cancer. n.d.; https://seer.cancer.gov/statfacts/html/ovary.html. Accessed November 1, 2019.
- 3. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Ovarian Cancer Including Fallopian Tube Cancer and Primary Peritoneal Cancer. Version 3.2019. https://www.nccn.org/professionals/physician_gls/PDF/ovarian.pdf. Accessed November 1, 2019.
- 4. Mobus V, Wandt H, Frickhofen N, et al. Phase III trial of high-dose sequential chemotherapy with peripheral blood stem cell support compared with standard dose chemotherapy for first-line treatment of advanced ovarian cancer: intergroup trial of the AGO-Ovar/AIO and EBMT. J Clin Oncol. Sep 20 2007;25(27):4187-4193. PMID 17698804

- 5. Papadimitriou C, Dafni U, Anagnostopoulos A, et al. High-dose melphalan and autologous stem cell transplantation as consolidation treatment in patients with chemosensitive ovarian cancer: results of a single- institution randomized trial. Bone Marrow Transplant. Mar 2008;41(6):547-554. PMID 18026149
- 6. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). High-dose chemotherapy with autologous stem-cell support for epithelial ovarian cancer. TEC Assessments. 1998; Volume 13:Tab 6.
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- 8. Donato ML, Aleman A, Champlin RE, et al. Analysis of 96 patients with advanced ovarian carcinoma treated with high-dose chemotherapy and autologous stem cell transplantation. Bone Marrow Transplant. Jun 2004;33(12):1219-1224. PMID 15122311
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- 11. Stiff PJ, Veum-Stone J, Lazarus HM, et al. High-dose chemotherapy and autologous stem-cell transplantation for ovarian cancer: an autologous blood and marrow transplant registry report. Ann Intern Med. Oct 3 2000;133(7):504-515. PMID 11015163
- 12. Sabatier R, Goncalves A, Bertucci F, et al. Are there candidates for high-dose chemotherapy in ovarian carcinoma? J Exp Clin Cancer Res. Oct 16 2012;31:87. PMID 23072336
- 13. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) for STEM CELL Transplantation (110.8.1). 2010; Version 5: https://www.cms.gov/medicare-coverage-database/details/ncd
 - details.aspx?ncdid=45&ncdver=5&coverageselection=both&articletype=all&policytype=final&s=penns ylvania&ke yword=stem+cell&keywordlookup=title&keywordsearchtype=and&bc=gaaaabaaaaaa&. Accessed November 1, 2019.