

MEDICAL POLICY

POLICY TITLE	HEMATOPOIETIC CELL TRANSPLANTATION FOR EPITHELIAL OVARIAN CANCER
POLICY NUMBER	MP-9.047

Effective Date:	6/1/2023
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POLICY RATIONALE	PRODUCT VARIATIONS DEFINITIONS	DESCRIPTION/BACKGROUND BENEFIT VARIATIONS
DISCLAIMER	CODING INFORMATION	REFERENCES
POLICY HISTORY		

I. POLICY

Autologous or allogeneic hematopoietic cell transplantation is considered **investigational** to treat advanced stage epithelial ovarian cancer. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Cross-references:

MP 9.048 Hematopoietic Cell Transplantation Miscellaneous Solid Tumors in Adults

MP 9.052 Hematopoietic Cell Transplantation in the Treatment of Germ-Cell Tumors

The National Comprehensive Cancer Network (NCCN) is a nonprofit alliance of cancer centers throughout the United States. NCCN develops the Clinical Practice Guidelines in Oncology which are recommendations aimed to help health care professionals diagnose, treat and manage patients with cancer. Guidelines evolve continuously as new treatments and diagnostics emerge and may be used by Capital Blue Cross when determining medical necessity according to this policy.

II. PRODUCT VARIATIONS

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This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations as discussed in Section VI. Please see additional information below.

FEP PPO: Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at:

<https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies>

III. DESCRIPTION/BACKGROUND

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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.

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

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and deaths from ovarian cancer in the United States for 2021 were estimated at 21,410 and 13,770, respectively. Most ovarian cancer patients present with widespread disease, and the National Cancer Institute Surveillance, Epidemiology and Results Program reported a 49.1% 5 year survival for all cases between 2011 and 2017.

Treatment

Current management for advanced epithelial ovarian cancer is cytoreductive surgery with chemotherapy. 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 (e.g. cisplatin), the preferred regimen for the newly diagnosed advanced disease. 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. However, cancer recurs in most women, and they die of the disease because chemotherapy drug resistance leads to uncontrolled cancer growth.

Hematopoietic Cell Transplantation

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 “naïve” and thus are associated with a lower incidence of rejection or graft-versus-host disease. Cord blood is discussed in detail in MP 9.001 Placental/Umbilical Cord Blood as a Source of Stem Cells.

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

REGULATORY STATUS

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

IV. RATIONALE

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SUMMARY OF EVIDENCE

For individuals who have advanced-stage epithelial ovarian cancer who receive HCT, the evidence includes randomized trials and data from case series and registries. 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

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outcomes in treating epithelial ovarian cancer, including survival, compared with conventional standard doses of chemotherapy. The evidence is insufficient to determine that the technology results in an improvement in net health outcomes.

V. DEFINITIONS

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NA

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's health benefit plan. Benefit determinations should be based in all cases on the applicable health benefit plan language. Medical policies do not constitute a description of benefits. A member's health benefit plan governs which services are covered, which are excluded, which are subject to benefit limits and which require preauthorization. There are different benefit plan designs in each product administered by Capital Blue Cross. Members and providers should consult the member's health benefit plan for information or contact Capital Blue Cross for benefit information.

VII. DISCLAIMER

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Capital Blue Cross's medical policies are developed to assist in administering a member's benefits, do not constitute medical advice, and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. If a provider or a member has a question concerning the application of this medical policy to a specific member's plan of benefits, please contact Capital Blue Cross' Provider Services or Member Services. Capital Blue Cross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational when used for treatment of Epithelial Ovarian Cancer:

Procedure Codes								
38204	38205	38206	38207	38208	38209	38210	38211	38212
38213	38214	38215	38230	38232	38240	38241	S2140	S2142
S2150								

IX. REFERENCES

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1. American Cancer Society. *Cancer Facts & Figures 2021*. Atlanta, GA: American Cancer Society; 2021

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2. National Cancer Institute, Surveillance Epidemiology and End Results Program. *Cancer Stat Facts: Ovarian Cancer*. n.d
3. 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): 4187-93. PMID 17698804
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5. 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.
6. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Salvage high-dose chemotherapy with allogeneic stem cell support for relapse following high-dose chemotherapy with autologous stem cell support for non-lymphoid solid tumors. *TEC Assessments*. 1999; Volume 14: Tab 11.
7. 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): 1219-24. PMID 15122311
8. Ledermann JA, Herd R, Maraninchi D, et al. High-dose chemotherapy for ovarian carcinoma: long-term results from the Solid Tumour Registry of the European Group for Blood and Marrow Transplantation (EBMT). *Ann Oncol*. May 2001; 12(5): 693-9. PMID 11432630
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11. 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
12. National Comprehensive Cancer Network (NCCN). *NCCN Clinical Practice Guidelines in Oncology: Ovarian Cancer Including Fallopian Tube Cancer and Primary Peritoneal Cancer*. Version 1.2023
13. National Comprehensive Cancer Network (NCCN). *NCCN Clinical Practice Guidelines in Oncology: Hematopoietic Cell Transplantation (HCT): Pre-Transplant Recipient Evaluation and Management of Graft-Versus-Host Disease*. Version 2.2022
14. Centers for Medicare & Medicaid Services. *National Coverage Determination (NCD) for Stem Cell Transplantation (110.23, formerly 110.8.1)*. 2016
15. Blue Cross Blue Shield Association Medical Policy Reference Manual. 8.01.23 *Hematopoietic Cell Transplantation for Epithelial Ovarian Cancer* February 2023

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X. POLICY HISTORY

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MP 9.047	CAC 5/20/14 Minor. Information on HSCT for Epithelial Ovarian Cancer was extracted from MP 9.037 Autologous and Allogeneic Stem Cell Transplantation (which was retired) and this new separate policy created. No change to policy statements. References updated. Rationale section added. Policy coded.
	CAC 6/2/15 Consensus. No change to policy statements. References and rationale reviewed. Codes reviewed.
	CAC 5/31/16 Consensus. No change to policy statements. References and rationale updated. Coding reviewed.
	Admin update 1/1/17: Product variation section reformatted.
	CAC 7/25/17 Consensus review. No change to the policy statements. Changed “hematopoietic stem cell transplantation” to hematopoietic cell transplantation in title and per NCCN terminology change. Background, rationale, and references updated. Coding reviewed.
	10/24/17 Administrative Update – CPT codes 38220 and 38221 removed from policy as they are not applicable.
	1/1/18 Admin Update: Medicare variations removed from Commercial Policies.
	4/5/18 Consensus review. Policy statement revised to add “advanced stage” associated with epithelial ovarian cancer; intent of the policy is unchanged. Updated background and references. Condensed rationale to include the summary of evidence only.
	2/22/19 Consensus review. No changes to the policy statements. References reviewed. Rationale revised.
	02/27/2020 Consensus review. No changes to the policy statements. References reviewed.
	2/3/2021 Consensus review. No changes to policy statement. References updated.
	02/21/2022 Consensus Review. Policy statement unchanged. NCCN language added. FEP language updated. Background and References updated.
	02/15/2023 Consensus Review. No change to policy statement. Background, Rationale and References updated.

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