

## Corporate Medical Policy

### Hematopoietic Stem-Cell Transplantation for Epithelial Ovarian Cancer

**File Name:** hematopoietic\_stem-cell\_transplantation\_for\_epithelial\_ovarian\_cancer  
**Origination:** 2/2001  
**Last CAP Review:** 11/2011  
**Next CAP Review:** 11/2012  
**Last Review:** 11/2011

#### **Description of Procedure or Service**

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The use of hematopoietic stem-cell transplantation (HSCT) has been investigated for treatment of patients with epithelial ovarian cancer. Hematopoietic stem cells are infused to restore bone marrow function following cytotoxic doses of chemotherapeutic agents with or without whole body radiation therapy.

#### **Hematopoietic Stem-Cell Transplantation**

Hematopoietic stem-cell transplantation (HSCT) refers to a procedure in which hematopoietic stem cells are infused to restore bone marrow function in cancer patients who receive bone marrow toxic doses of cytotoxic drugs with or without whole body radiation therapy. Bone marrow stem cells may be obtained from the transplant recipient (autologous HSCT) or from a donor (allogeneic HSCT). 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.

HSCT is an established treatment for certain hematologic malignancies; however, its use in solid tumors in adults continues to be largely experimental. Initial enthusiasm for the use of autologous transplant with the use of high-dose chemotherapy and stem cells for solid tumors has waned with the realization that dose intensification often fails to improve survival, even in tumors with a linear-dose response to chemotherapy. With the advent of reduced-intensity conditioning (RIC) allogeneic transplant, interest has shifted to exploring the generation of alloreactivity to metastatic solid tumors via a graft-versus-tumor effect of donor-derived T cells.

#### **Epithelial Ovarian Cancer**

Several different 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 in 2008 are estimated at 21,650 and 15,520. Most ovarian cancer patients present with widespread disease, and yearly mortality is approximately 65% of the incidence rate.

The current management of advanced epithelial ovarian cancer is cytoreductive surgery followed by combination chemotherapy. Approximately 75% of patients present with International Federation of Gynecology and Obstetrics (FIGO) stage III or IV ovarian cancer, and treated with the combination of paclitaxel and a platinum analog being the preferred regimen for newly diagnosed advanced disease. The use of platinum and taxanes has improved progression-free survival (PFS) and overall survival (OS) rates in advanced disease to 16–21 months and 32–57 months, respectively. However, most of these women develop recurrences and die of their disease as chemotherapy drug resistance

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leads to uncontrolled cancer growth.

High-dose chemotherapy has been investigated as a way to overcome drug resistance. However, limited data exist on this treatment approach, and the ideal patient population and best regimen remain to be established. Hematopoietic stem-cell transplantation has been studied in a variety of patient groups with ovarian cancer as follows:

- to consolidate remission after initial treatment
- to treat relapse after a durable response to platinum-based chemotherapy
- to treat tumors that relapsed after less than 6 months
- to treat refractory tumors

## **Related Policies:**

Hematopoietic Stem-Cell Transplantation in the Treatment of Germ Cell Tumors

***\*\*\*Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.***

## **Policy**

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**Hematopoietic Stem-Cell Transplantation for Epithelial Ovarian Cancer is considered investigational. BCBSNC does not cover investigational services or procedures.**

**Some patients may be eligible for coverage under Clinical Trials. Refer to the policy on Clinical Trial Services for Life-Threatening Conditions.**

## **Benefits Application**

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This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

**Some health benefit plans may exclude benefits for transplantation.**

## **When Hematopoietic Stem-Cell Transplantation for Epithelial Ovarian Cancer is covered**

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Not applicable.

## **When Hematopoietic Stem-Cell Transplantation for Epithelial Ovarian Cancer is not covered**

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Autologous or allogeneic hematopoietic stem-cell transplantation is considered investigational as a treatment of epithelial ovarian cancer. BCBSNC does not cover investigational services.

Stem-cell transplantation to treat germ cell tumors of the ovary is considered in a separate policy entitled, Hematopoietic Stem-Cell Transplantation in the Treatment of Germ Cell Tumors

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## Policy Guidelines

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Refer to the individual member's benefit booklet for prior review requirements.

The evidence for the use of hematopoietic stem-cell transplant (HSCT) as an adjunct to high-dose chemotherapy in epithelial ovarian cancer is based on 2 published randomized trials with conflicting outcomes, and data from case series and registries. At present, the evidence is insufficient to recommend this intervention in either first-line therapy or for patients in whom epithelial ovarian cancer has relapsed following standard chemotherapy, and therefore, the use of HSCT in epithelial ovarian cancer remains investigational.

National Comprehensive Cancer Network clinical practice guidelines for ovarian cancer indicate that HDC with peripheral blood stem-cell transplantation is considered investigational for the treatment of ovarian cancer.

## Billing/Coding/Physician Documentation Information

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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

*Applicable service codes: 38205, 38206, 38230, 38232, 38240, 38241, 38242, S2150*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

## Scientific Background and Reference Sources

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### Bone Marrow Transplant for Epithelial Ovarian Cancer

TEC Assessment, May, 1998; Volume 13, No. 6

TEC Assessment, July, 1999; Volume 14, No. 11

BCBSA Medical Policy Reference Manual, 4/30/2000

Specialty Matched Consultant Advisory Panel - 11/2002

National Comprehensive Cancer Network. (2003). NCCN practice guidelines in oncology, ovarian. Retrieved 9/8/2004 from [http://www.nccn.org/professionals/physician\\_gls/PDF/ovarian/pdf](http://www.nccn.org/professionals/physician_gls/PDF/ovarian/pdf)

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.23, 11/2004

Specialty Matched Consultant Advisory Panel - 11/2004

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National Comprehensive Cancer Network. (2006). NCCN practice guidelines in oncology, ovarian. Retrieved 8/7/06 from [http://www.nccn.org/professionals/physician\\_gls/PDF/ovarian/pdf](http://www.nccn.org/professionals/physician_gls/PDF/ovarian/pdf)

National Comprehensive Cancer Network. (2008). NCCN practice guidelines in oncology, ovarian. [http://www.nccn.org/professionals/physician\\_gls/PDF/ovarian.pdf](http://www.nccn.org/professionals/physician_gls/PDF/ovarian.pdf)

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.23, 12/18/07

Specialty Matched Consultant Advisory Panel - 11/2008

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BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.23, 11/12/2009

Specialty Matched Consultant Advisory Panel - 11/2010

Specialty Matched Consultant Advisory Panel - 11/2011

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.23, 11/10/2011

## **Policy Implementation/Update Information**

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### **Bone Marrow Transplant for Epithelial Ovarian Cancer**

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| 1/01     | Specialty Matched Consultant Advisory Group.   |
| 2/01     | Original policy issued.  |
| 2/03     | Specialty Matched Consultant Advisory Panel meeting 11/2002. Revised the Policy statement to include the statement that, "Some patients may be eligible for coverage under Clinical Trials. Refer to the policy on Clinical Trial Services for Life-Threatening Conditions." Codes 86812-86822 removed; codes 38231 and 86915 deleted and codes 38242, 38205 and 38206 added to the Billing/Coding section. System coding changes. |
| 1/04     | Benefits Application and Billing/Coding sections updated for consistency.  |
| 2/04     | Individual CPT codes listed for CPT code ranges 38240-38242 under Billing/Coding section.  |
| 7/29/04  | HCPCS code S2150 added to Billing/Coding section.  |
| 12/23/04 | Specialty Matched Consultant Advisory Panel review 11/29/04. No changes to criteria. Revised Description of Procedure or Service section. Added rationale to Policy Guidelines section. Policy number added to Policy Key Words section. "Hematopoietic" and "Opportunistic" added to Definitions. References added.   |
| 12/11/06 | Specialty Matched Consultant Advisory Panel review 11/6/2006. No changes to policy statement. "Policy Guidelines" section updated. References added.   |
| 12/22/08 | Specialty Matched Consultant Advisory Panel review 11/13/2008. No changes to policy  |

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statement. "Policy Guidelines" section updated. References added. (btw)

6/22/10 Policy Number(s) removed. (amw)

## **Hematopoietic Stem-Cell Transplantation for Epithelial Ovarian Cancer**

1/4/11 Policy name changed from "Bone Marrow Transplant for Epithelial Ovarian Cancer" to "Hematopoietic Stem-Cell Transplantation for Epithelial Ovarian Cancer." Specialty Matched Consultant Advisory Panel review 11/29/2010. "Description" section revised. No change to policy statement. Removed statement indicating; "Services for or relating to the search for a donor is not covered." "Policy Guidelines" updated. References added. (btw)

1/10/12 Specialty Matched Consultant Advisory Panel review 11/30/2011. No change to policy statement. "Policy Guidelines" updated. (btw)

2/7/12 Added new 2012 CPT code, 38232 to Billing/Coding section. Reference added. (btw)

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.