

## Corporate Medical Policy

### Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome

<b>File Name:</b>	hematopoietic_cell_transplantation_for_plasma_cell_dyscrasias_multiple_myeloma
<b>Origination:</b>	2/2001
<b>Last CAP Review:</b>	11/2019
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#### Description of Procedure or Service

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Multiple myeloma (MM) is a systemic malignancy of plasma cells that represents approximately 10% of all hematologic cancers. Plasma cell dyscrasias are treatable but rarely curable. POEMS syndrome, characterized by polyneuropathy, organomegaly, endocrinopathy, M protein, and skin changes, is a rare, paraneoplastic disorder secondary to a plasma-cell dyscrasia. In some cases, hematopoietic cell transplantation is considered as therapy.

##### **Hematopoietic Cell Transplantation**

Hematopoietic 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. Hematopoietic stem cells may be obtained from the transplant recipient (autologous HCT) or from a donor (allogeneic HCT). They can be harvested from bone marrow, peripheral blood, or umbilical cord blood 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 (GVHD). Cord blood is discussed in greater detail in the Cord Blood as a Source of Stem Cells medical policy.

Immunologic compatibility between infused hematopoietic stem cells and the recipient is not an issue in autologous HCT. However, immunologic compatibility between donor and patient is a critical factor for achieving a good outcome of allogeneic HCT. Compatibility is established by typing human leukocyte antigens (HLA) using cellular, serologic, or molecular techniques. HLA refers to the tissue type expressed at the Class I and Class II loci on each arm of chromosome 6. Depending on the disease being treated, an acceptable donor will match the patient at all or most of the HLA loci (with the exception of umbilical cord blood).

##### **Conventional Preparative Conditioning for HCT**

The conventional (“classical”) practice of allogeneic HCT involves administration of cytotoxic agents (e.g., cyclophosphamide, busulfan) with or without total body irradiation at doses sufficient to destroy endogenous hematopoietic capability in the recipient. The beneficial treatment effect in this procedure is due to a combination of initial eradication of malignant cells and subsequent graft-versus-malignancy (GVM) effect mediated by non-self immunologic effector cells that develop after engraftment of allogeneic stem cells within the patient’s bone marrow space. While the slower GVM effect is considered to be the potentially curative component, it may be overwhelmed by extant disease without the use of pre-transplant conditioning. However, intense conditioning regimens are limited to patients who are sufficiently fit medically to tolerate substantial adverse effects that include pre-engraftment opportunistic infections secondary to loss of endogenous bone marrow function and organ damage and failure caused by the cytotoxic drugs. Furthermore, in any allogeneic HCT, immune suppressant drugs

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are required to minimize graft rejection and GVHD, which also increases susceptibility of the patient to opportunistic infections.

The success of autologous HCT is predicated on the ability of cytotoxic chemotherapy with or without radiation to eradicate cancerous cells from the blood and bone marrow. This permits subsequent engraftment and repopulation of bone marrow space with presumably normal hematopoietic stem cells obtained from the patient prior to undergoing bone marrow ablation. As a consequence, autologous HCT is typically performed as consolidation therapy when the patient's disease is in complete remission. Patients who undergo autologous HCT are susceptible to chemotherapy-related toxicities and opportunistic infections prior to engraftment, but not GVHD.

## **Reduced-Intensity Conditioning for Allogeneic HCT**

Reduced-intensity conditioning (RIC) refers to the pretransplant use of lower doses or less intense regimens of cytotoxic drugs or radiation than are used in conventional full-dose myeloablative conditioning treatments. The goal of RIC is to reduce disease burden, but also to minimize as much as possible associated treatment-related morbidity and non-relapse mortality (NRM) in the period during which the beneficial GVM effect of allogeneic transplantation develops. Although the definition of RIC remains arbitrary, with numerous versions employed, all seek to balance the competing effects of NRM and relapse due to residual disease. RIC regimens can be viewed as a continuum in effects, from nearly total myeloablative to minimally myeloablative with lymphoablation, with intensity tailored to specific diseases and patient condition. Patients who undergo RIC with allogeneic HSCT initially demonstrate donor cell engraftment and bone marrow mixed chimerism. Most will subsequently convert to full-donor chimerism, which may be supplemented with donor lymphocyte infusions to eradicate residual malignant cells.

For the purposes of this policy, the term "reduced-intensity conditioning" will refer to all conditioning regimens intended to be nonmyeloablative, as opposed to fully myeloablative (traditional) regimens.

## **Multiple Myeloma**

Multiple myeloma (MM) is a systemic malignancy of plasma cells that represents approximately 10% of all hematologic cancers. It is treatable but rarely curable. At the time of diagnosis most patients have generalized disease, and, the selection of treatment is influenced by patient age, general health, prior therapy, and the presence of complications of the disease.

The disease is staged by estimating tumor mass, based on various clinical parameters such as hemoglobin, serum calcium, number of lytic bone lesions, and the presence or absence of renal failure. Multiple myeloma usually evolves from an asymptomatic premalignant stage (termed "monoclonal gammopathy of undetermined significance" or MGUS). Treatment is usually reserved for patients with symptomatic disease (usually progressive myeloma), whereas asymptomatic patients are observed, as there is little evidence that early treatment of asymptomatic multiple myeloma prolongs survival when compared to therapy delivered at the time of symptoms or end-organ damage. In some patients, an intermediate asymptomatic but more advanced premalignant stage is recognized, and referred to as smoldering multiple myeloma. The overall risk of disease progression from smoldering to symptomatic multiple myeloma is 10% per year for the first 5 years, approximately 3% per year for the next 5 years, and 1% for the next 10 years.

## **POEMS Syndrome**

POEMS syndrome (also known as osteosclerotic myeloma, Crow-Fukase syndrome, or Takasaki syndrome) is a rare, paraneoplastic disorder secondary to a plasma-cell dyscrasia. This complex, multiorgan disease was first described in 1938, but the acronym POEMS was coined in 1980, reflecting hallmark characteristics of the syndrome: polyneuropathy, organomegaly, endocrinopathy, M protein, and skin changes. No single test establishes the presence of POEMS

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syndrome. Its pathogenesis is undefined, although some evidence suggests it is mediated by imbalance of proinflammatory cytokines including interleukin-1 $\beta$  (IL-1 $\beta$ ), IL-6, and tumor necrosis factor- $\alpha$ ; vascular endothelial growth factor may also be involved. However, specific criteria have been established, and the syndrome may entail other findings in the constellation of signs and symptoms, as shown in the Table. Both major criteria and at least one of the minor criteria are necessary for diagnosis.

Major Criteria	Minor Criteria	Known Associations	Possible Associations
Polyneuropathy	Sclerotic bone lesions	Clubbing	Pulmonary hypertension
Monoclonal plasmaproliferative disorder	Castleman disease	Weight loss	Restrictive lung disease
	Organomegaly (splenomegaly, hepatomegaly, or lymphadenopathy)	Thrombocytosis	Thrombotic diathesis
	Edema (edema, pleural effusion, or ascites)	Hyperhidrosis	Cardiomyopathy (systolic dysfunction)
	Endocrinopathy (adrenal, thyroid, pituitary, gonadal, parathyroid, pancreatic)		Fever
	Skin changes (hyperpigmentation, hypertrichosis, plethora, hemangiomas, white nails)		Low vitamin B12 values
	Papilledema		Diarrhea

The prevalence of POEMS syndrome is unclear. A national survey in Japan showed a prevalence of about 0.3 per 100,000. Other large series have been described in the United States and in India. In general, patients with POEMS have a superior overall survival compared with that of MM, nearly 14 years in a large series from the Mayo Clinic. However, given the rarity of POEMS, no randomized controlled trials of therapies have been reported. Numerous approaches have included ionizing radiation, plasmapheresis, intravenous immunoglobulin, interferon alfa, corticosteroids, alkylating agents, azathioprine, tamoxifen, transretinoic acid, and high-dose chemotherapy with autologous HCT support. Optimal treatment involves eliminating the plasma cell clone, for example, by surgical excision or local radiation therapy for an isolated plasmacytoma, or systemic chemotherapy in patients with disseminated disease, such as medullary disease or multiple plasmacytomas. Given the underlying plasma cell dyscrasia of POEMS, newer approaches to MM, including bortezomib, lenalidomide, and thalidomide, are also under investigation.

**\*\*\*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

**BCBSNC will provide coverage for Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.**

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**If the medical criteria and guidelines are not met, some patients may be eligible for coverage under Clinical Trials. Refer to the policy, Clinical Trial Services.**

## 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 Cell Transplantation for Plasma Cell Dyscrasias is covered

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### Multiple Myeloma

1. A single or second (salvage) autologous hematopoietic cell transplantation may be considered medically necessary to treat multiple myeloma.
2. Tandem autologous hematopoietic cell transplantation may be considered medically necessary to treat multiple myeloma in patients who fail to achieve at least a near-complete or very good partial response after the first transplant in tandem sequence. (For definitions of near-complete response and very good partial response, see Policy Guidelines).
3. Tandem transplantation with an initial round of autologous hematopoietic cell transplantation followed by a non-marrow-ablative conditioning regimen and allogeneic hematopoietic cell transplantation (i.e., reduced-intensity conditioning transplant) may be considered medically necessary to treat newly diagnosed multiple myeloma patients.

### POEMS syndrome

1. Autologous hematopoietic cell transplantation may be considered medically necessary to treat disseminated POEMS syndrome. (see Policy Guidelines)

## When Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias is not covered

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1. When the medical criteria listed above are not met.
2. Allogeneic hematopoietic cell transplantation, myeloablative or nonmyeloablative, as upfront therapy of newly diagnosed multiple myeloma or as salvage therapy, is considered investigational.
3. Allogeneic and tandem hematopoietic cell transplantation are considered investigational to treat POEMS syndrome.

## Policy Guidelines

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

### **Newly Diagnosed Multiple Myeloma**

For individuals who have newly diagnosed multiple myeloma who receive autologous hematopoietic cell transplantation (HCT) as initial treatment, includes several prospective, randomized controlled trials (RCTs) that compared conventional chemotherapy with high-dose chemotherapy with autologous HCT. Relevant outcomes include overall survival (OS) and treatment-associated morbidity. In general,

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the evidence suggests OS rates are improved with autologous HCT compared with conventional chemotherapy in this setting. Limitations of the published evidence include patient heterogeneity; variability in treatment protocols; short follow-up periods; inconsistency in reporting important health outcomes; and, inconsistency in reporting or collecting outcomes. The evidence is sufficient to determine quantitatively that the technology results in a meaningful improvement in the net health outcome.

For individuals who have newly diagnosed multiple myeloma who receive tandem autologous HCT, the evidence includes several RCTs. Relevant outcomes include overall survival and treatment-related morbidity. Compared with single autologous HCT, a number of RCTs demonstrated tandem autologous HCT improved OS and recurrence-free survival in newly diagnosed multiple myeloma. The available RCTs compare RIC allogeneic HCT (allo-HCT) following a first autologous HCT with single or tandem autologous transplants. The RCTs were based on “genetic randomization,” ie, patients with a human leukocyte antigen-identical sibling who were offered an RIC allo-HCT following autologous HCT, whereas other patients underwent either 1 or 2 autologous transplants. Although the body of evidence has shown inconsistencies in terms of overall survival and disease-free survival rates, some studies have shown a survival benefit with tandem autologous HCT followed by RIC allogeneic HCT, although at a cost of higher transplant-related mortality compared with conventional treatments. Factors across studies that may account for differing trial results include different study designs, nonuniform preparative regimens, different patient characteristics (including risk stratification), and criteria for advancing to a second transplant. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have newly diagnosed multiple myeloma who receive allogeneic HCT (allo-HCT) with as initial or salvage treatment, the evidence includes nonrandomized studies. Relevant outcomes include overall survival and treatment-related morbidity. Studies have reported on patients with both myeloablative and RIC conditioning. Limitations of the published evidence include patient sample heterogeneity, variability in treatment protocols, short follow-up periods, inconsistency in reporting important health outcomes, and inconsistency in reporting or collecting outcomes. Nonmyeloablative allo-HCT as first-line therapy is associated with lower transplant-related mortality but a greater risk of relapse; convincing evidence is lacking that allo-HCT improves survival better than autologous HCT. The evidence is insufficient to determine the effects of the technology on health outcomes.

## **Relapsed or Refractory Multiple Myeloma**

For individuals who have relapsed multiple myeloma who receive autologous HCT after failing an autologous HCT, the evidence includes 1 RCT and a systematic review summarizing data from 4 series of patients who relapsed after a first autologous HCT. Relevant outcomes include overall survival and treatment-related morbidity. Despite some limitations of the published evidence, including patient sample heterogeneity, variability in treatment protocols, and short follow-up periods, the available trial evidence has suggested overall survival rates are improved with autologous HCT compared with conventional chemotherapy in this setting. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have refractory multiple myeloma who receive tandem autologous HCT after failing the first transplant, the evidence includes 3 RCTs. Relevant outcomes include overall survival and treatment-related morbidity. The evidence has shown tandem autologous HCT improves overall survival rates in this setting. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

## **POEMS Syndrome**

The evidence for HCT of any type in patients who have POEMS syndrome includes case reports and series. Relevant outcomes include OS and treatment-related morbidity. No RCTs of HCT of any type have been performed in patients with POEMS syndrome of any severity, nor is it likely such studies will be performed because of the rarity of this condition. Available case reports and series are subject to selection bias and are heterogeneous with respect to treatment approaches and peritransplant support.

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However, for patients with disseminated POEMS syndrome, a chain of indirect evidence and contextual factors related to the disease and MM, suggests improvement in health outcomes with autologous HCT. The evidence is sufficient to determine qualitatively that autologous HCT results in a meaningful improvement in the net health outcome. The evidence is insufficient to determine the effects of the technology on health outcomes.

## **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 codes: 38205, 38206, 38230, 38232, 38240, 38241, 38242, 38243, 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 Multiple Myeloma and Primary Amyloidosis**

Barlogie B, et.al. Superiority of Tandem Autologous Transplantation Over Standard Therapy for Previously Untreated Multiple Myeloma. *Blood*, Volume 89, No. 3, February 11, 1997; pp. 789-793.

BCBSA TEC Evaluation, May 1998; Tab 8

Barlogie B, et.al. Total Therapy with Tandem Transplants for Newly Diagnosed Multiple Myeloma. *Blood*, Volume 93, No. 1, January 1, 1999; pp. 55-65.

BCBSA TEC Evaluation, March 1999; Tab 26

BCBSA Medical Policy Reference Manual, 12/1/1999; 8.01.17

Lemoli R, et.al. Engraftment, clinical and molecular follow-up of patients with multiple myeloma who were reinfused with highly purified CD34+ cells to support single or tandem high-dose chemotherapy. *Blood*, Volume 95, No. 7, April 1, 2000.

BCBSA Medical Policy Reference Manual, 8/18/2000; 8.01.17

BCBSA Medical Policy Reference Manual, 11/20/01; 8.01.17

Specialty Matched Consultant Advisory Panel - 11/2002

### **Bone Marrow Transplant for Multiple Myeloma**

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 4/16/2004

Specialty Matched Consultant Advisory Panel 11/2004

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 7/20/2006

Specialty Matched Consultant Advisory Panel 11/2006

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 7/10/2008

Specialty Matched Consultant Advisory Panel 11/2008

# Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome

## **Hematopoietic Stem-Cell Transplantation for Multiple Myeloma**

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 1/14/2010

Specialty Matched Consultant Advisory Panel – 11/2010

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 3/10/2011

Specialty Matched Consultant Advisory Panel – 11/2011

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 4/12/2012

Specialty Matched Consultant Advisory Panel – 11/2012

## **Hematopoietic Stem-Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome**

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 8/8/2013

Senior Medical Director – 9/2013

Specialty Matched Consultant Advisory Panel – 11/2013

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 8/14/2014

Specialty Matched Consultant Advisory Panel- 11/2014

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 8/13/2015

Specialty Matched Consultant Advisory Panel- 11/2015

Specialty Matched Consultant Advisory Panel- 11/2016

## **Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome**

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 1/12/2017

Medical Director review 1/2017

Specialty Matched Consultant Advisory Panel- 11/2017

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 1/11/2018

Specialty Matched Consultant Advisory Panel- 11/2018

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.17, 1/17/19

Specialty Matched Consultant Advisory Panel- 11/2019

## **Policy Implementation/Update Information**

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### **Bone Marrow Transplant for Multiple Myeloma and Primary Amyloidosis**

1/01 Specialty Matched Consultant Advisory Group. Under the Policy Guidelines section, adopted recommendation that tandem transplants be considered for specific criteria.

# Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome

- 2/01 Original policy issued.
- 1/02 Policy named changed from Bone Marrow Transplant for Multiple Myeloma. Policy statement revised to include Primary Amyloidosis as investigational.
- 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.

## **Bone Marrow Transplant for Multiple Myeloma**

- 12/23/04 Specialty Matched Consultant Advisory Panel review 11/29/2004. Split policy to remove reference to Primary Amyloidosis and changed name. Created new policy for Primary Amyloidosis/SUR6090.18. Revised Description of Procedure or Service section. Added new indications (bullets 2 and 3) to "When covered section" which states; "A second course of high-dose chemotherapy with autologous stem-cell support may be considered medically necessary to treat responsive multiple myeloma that has relapsed after a durable complete or partial remission following an autologous transplant or" "tandem high-dose chemotherapy with autologous stem-cell support may be considered medically necessary to treat newly diagnosed or responsive multiple myeloma". Added the 3rd and 4th bullet under "When not covered" which states; "Non-marrow ablative chemotherapy and allogeneic stem cell support following high-dose chemotherapy with autologous stem-cell support is considered investigational as the initial therapy of multiple myeloma." "Monotherapy using high-dose chemotherapy with allogeneic stem-cell support is considered investigational, either as initial therapy or after a prior failed course of high dose chemotherapy and autologous stem cell support." Added additional information regarding "responsive multiple myeloma", "partial remission", and "refractory multiple myeloma" to Policy Guidelines section. Removed reference to tandem autologous bone marrow transplants from the Policy Guidelines section. Added policy number to Policy Key Words. "Hematopoietic" and "Opportunistic" added to Definitions. References added. Notice given 12/23/2004. Effective date 3/3/2005.
- 11/3/05 Added "including primary refractory myeloma" to first bullet under the "When covered" section. Added explanation of "primary refractory myeloma" to "Policy Guidelines" and to "Policy Key Words" section.
- 12/11/06 Specialty Matched Consultant Advisory Panel review 11/6/2006. Added the following statement to the "Policy" section; "If the medical criteria and guidelines are not met, some patients may be eligible for coverage under Clinical Trials. Refer to the policy, Clinical Trial Services for Life-Threatening Conditions." No changes to policy statement. References added.

# Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome

12/22/08 Specialty Matched Consultant Advisory Panel review 11/13/2008. Added "2. HDC and autologous stem cell support may be considered medically necessary in the treatment of multiple myeloma patients with primary progressive disease who are not at high risk." and "5. Tandem transplantation with an initial round of autologous stem cell support followed by a non- marrow-ablative conditioning regimen and allogeneic stem cell transplant may be considered medically necessary to treat newly diagnosed multiple myeloma patients with an Human leukocyte antigens (HLA)-identical sibling donor and who are in otherwise reasonably good health." to the "When Covered" section. Removed "Non-marrow ablative chemotherapy and allogeneic stem cell support following high-dose chemotherapy with autologous stem-cell support is considered investigational as the initial therapy of multiple myeloma." from the "When Not Covered" section. Updated "Policy Guidelines" section. References added. (btw)

## **Hematopoietic Stem-Cell Transplantation for Multiple Myeloma**

- 8/31/10 Policy name changed from "Bone Marrow Transplantation for Multiple Myeloma" to Hematopoietic Stem-Cell Transplantation for Multiple Myeloma. The policy has been extensively revised. Policy number removed. "Description" revised. The policy statements have been updated to reflect current practice. Removed the statement in the "Benefit Application" section that indicated "Services for or related to the search for a donor are not covered." Deleted the following "When Covered" statements: "1. HDC and autologous stem cell support may be considered medically necessary in the treatment of newly diagnosed or responsive multiple myeloma. OR 2.HDC and autologous stem cell support may be considered medically necessary in the treatment of multiple myeloma patients with primary progressive disease who are not at high risk. OR 3.A second course of high-dose chemotherapy with autologous stem-cell support may be considered medically necessary to treat responsive multiple myeloma that has relapsed after a durable complete or partial remission following an autologous transplant. OR 4 .Tandem high-dose chemotherapy with autologous stem-cell support may be considered medically necessary to treat newly diagnosed or responsive multiple myeloma. OR 5.Tandem transplantation with an initial round of autologous stem cell support followed by a non- marrow-ablative conditioning regimen and allogeneic stem cell transplant may be considered medically necessary to treat newly diagnosed multiple myeloma patients with an Human leukocyte antigens (HLA)-identical sibling donor and who are in otherwise reasonably good health." Removed the following "When Not Covered" statements: " HDC and autologous stem cell support is considered investigational in the treatment of multiple myeloma in refractory relapse." and "Monotherapy using high-dose chemotherapy with allogeneic stem-cell support is considered investigational, either as initial therapy or after a prior failed course of high dose chemotherapy and autologous stem cell support." Policy Guidelines revised. Senior Medical Director review 5/3/10 References added. (btw)
- 1/4/11 Specialty Matched Consultant Advisory Panel review 11/29/2010. No change to policy statement. (btw)
- 5/24/11 "Description" section revised to show 2010 updated statistics regarding estimated new cases and deaths. Added "in the tandem sequence" to statement "2. Tandem autologous – autologous..." under the When Covered" section Medical Director review 5/12/11. Reference added. (btw)
- 1/10/12 "Description" section revised. Specialty Matched Consultant Advisory Panel review 11/30/2011. No change to policy intent. (btw)

# Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome

2/21/12 Added new 2012 CPT code, 38232, to Billing/Coding section. (btw)

6/29/12 Reference added. (btw)

12/28/12 Specialty Matched Consultant Advisory Panel review 12/4/2012. No change to policy intent. Added new 2013 CPT code, 38243 to Billing/Coding section. (btw)

## **Hematopoietic Stem-Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome**

10/1/13 Policy name changed from “Hematopoietic Stem-Cell Transplantation for Multiple Myeloma” to “Hematopoietic Stem-Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome”. Description section updated to include information regarding POEMS syndrome. Policy section changed from “BCBSNC will provide coverage for Hematopoietic Stem-Cell Transplantation for Multiple Myeloma when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.” to “BCBSNC will provide coverage for Hematopoietic Stem-Cell Transplantation for Plasma Cell Dyscrasias when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.” The following statement was added to the When Covered section; “Autologous hematopoietic stem-cell transplantation may be considered medically necessary to treat disseminated POEMS syndrome. (see Policy Guidelines)” Added “Allogeneic and tandem hematopoietic stem-cell transplantation are considered investigational to treat POEMS syndrome.” to the When Not Covered. Policy Guidelines section updated. Senior Medical Director review 9/14/2013. Reference added. (btw)

12/10/13 Specialty Matched Consultant Advisory Panel review 11/20/2013. No change to policy intent. (btw)

12/9/14 Changed file name to match title of policy. Reference added. Specialty matched consultant advisory panel review 11/24/2014. No change to policy intent. (lpr)

12/30/15 Updated Policy Guidelines section. Reference added. Specialty Matched Consultant Advisory Panel review 11/18/2015. No change to policy statement. (lpr)

12/30/16 Specialty Matched Consultant Advisory Panel review 11/30/2016. No change to policy intent. (lpr)

## **Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome**

4/28/17 Titled changed from “Hematopoietic Stem-Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome” to “Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome.” Revised Description and Policy Guidelines sections. Reference added. No change to policy intent. Medical Director review 1/2017. (lpr)

12/15/17 Specialty Matched Consultant Advisory Panel review 11/29/2017. No change to policy statement. (lpr)

# Hematopoietic Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome

12/14/18 Specialty Matched Consultant Advisory Panel review 11/28/2018. Reference added. No change to policy statement. (lpr)

12/31/19 Specialty Matched Consultant Advisory Panel review 11/20/2019. Reference added. No change to policy statement. (lpr)

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