

# Healthcare Operations

## Utilization Management Protocol

### Bone Marrow or Stem Cell Transplantation

HEALTH PLAN OF NEVADA, INC. <sup>SM</sup> SIERRA HEALTH AND LIFE INSURANCE COMPANY, INC. <sup>®</sup>

Number  
TRP008

#### Approved for \*Commercial & Medicare \*Coverage is dependent on specific plan benefit

For Sierra Health Option products please review plan documents prior to issuing a determination

#### Requires Medical Director Review

CPT: 38240-38241

#### Description:

Stem cell transplantation is a process in which stem cells are harvested from either a patient's or donor's bone marrow or peripheral blood for intravenous infusion. Autologous stem cell transplants (AuSCT) must be used to effect hematopoietic reconstitution following severely myelotoxic doses of chemotherapy (HDCT) and/or radiotherapy used to treat various malignancies. Allogeneic stem cell transplant may also be used to restore function in recipients having an inherited or acquired deficiency or defect.

Bone marrow and peripheral blood stem cell transplantation is a process which includes mobilization, harvesting, and transplant of bone marrow or peripheral blood stem cells and the administration of high dose chemotherapy or radiotherapy prior to the actual transplant. When bone marrow or peripheral blood stem cell transplantation is covered, all necessary steps are included in coverage. When bone marrow or peripheral blood stem cell transplantation is non-covered, none of the steps are covered.

#### Covered Indications and Limitations:

*Each member's certificate of coverage must be reviewed to determine transplant benefits (i.e. organ procurement, donor testing, transportation, home health, follow-up care, etc.).*

*The transplant must be performed at a contracted facility to be considered in plan.*

#### Allogeneic Bone Marrow or Stem Cell Transplantation

Allogeneic stem cell transplantation is a procedure in which a portion of a health donor's stem cell or bone marrow is obtained and prepared for intravenous infusion or transplantation.

#### Covered Indications for Allogeneic Bone Marrow or Stem Cell Transplantation

1. Myelodysplasia (diagnosed pre-leukemia)
2. Leukemia /AML, ALL, CML, CLL.
3. Non-Hodgkin's Lymphoma
4. Hodgkin's Disease
5. Aplastic Anemia
6. Severe combined immunodeficiency disease (SCID) (Wiskott-Aldrich Syndrome)
7. Multiple Myeloma (ICD-9-CM 279.12) when HLA-matched sibling donor is available

#### Non Covered Indications for Allogeneic Bone Marrow or Stem Cell Transplantation:

1. Breast Cancer
3. Primary (AL) Amyloidosis (CMS excludes coverage for patients > 63 years of age; coverage for patients < 64 years of age at Health Plan discretion)
4. Non-primary (AL) Amyloidosis (CMS excludes coverage)

Except as noted with the above limitations.

\* These protocols are to be used as guidelines in the decision-making process and do not represent standards of care of any individual patient. They are proprietary documents and may not be copied or distributed without express permission.

### **Autologous Stem Cell Transplantation (AuSCT)**

Autologous stem cell transplantation (AuSCT) is a technique for restoring stem cells using the patient's own previously stored cells.

### **Covered Indications for Autologous Bone Marrow or Stem Cell Transplantation:**

AuSCT is considered reasonable and necessary and covered for the following conditions:

1. Acute Leukemia in remission, (lymphoid, myeloid, monocytic, acute erythremia and erythroleukemia, and unspecified cell type with a high probability of relapse and no HLA) matched donor.
2. Resistant non-Hodgkin's lymphoma or those presenting with poor prognostic features following an initial response.
3. Recurrent or refractory neuroblastoma
4. Advanced Hodgkin's disease that failed conventional therapy and has no HLA-matched donor.
5. Multiple Myeloma with these limitations:  
Single AuSCT covered for Durie-Salmon stage II or III patients that fit the following requirements:
  - a. Newly diagnosed or responsive multiple myeloma, includes those patients with previously untreated disease, those with at least partial response to prior chemotherapy (defined as 50% decrease either in measurable paraprotein [serum and/or urine] or in bone marrow infiltration, sustained for at least one month), and those in responsive relapse; and
  - b. Adequate cardiac, renal, pulmonary, and hepatic function.
6. Multiple Myeloma in patients when ANY one of the following is met:
  - a. Newly diagnosed patient with chemosensitive tumor
  - b. As salvage treatment for patient with recurrences, if still chemosensitive

*Note: All requests must be approved by a Medical Director with knowledge of Durie-Salmon Multiple Myeloma.*

7. Primary Amyloidosis is to be used with high dose melphalan (HDM) with the following criteria:
  - a. Amyloid deposition in 2 or fewer organs, and
  - b. Cardiac left ventricular EF of greater than 45%.

### **Non Covered Indications for Autologous Stem cell Transplantation**

1. Acute leukemia not in remission
2. Chronic granulocytic leukemia
3. Solid tumors (other than neuroblastoma)
4. Multiple Myeloma (other than that described above), including sequential transplants for multiple myeloma
5. Non-primary (AL) Amyloidosis (CMS excludes coverage)

### **Contraindications for Both Allogeneic and Autologous Bone Marrow or Stem Cell Transplantation:**

1. History of drug/alcohol abuse
2. Lack of emotional stability or inability to accept the procedure, understand its nature or cooperate in the medical care required following transplantation.
3. Other metastatic or primary malignancy.

### **Review History:**

Issued: 10/25/01

Revised: 4/21/05, 12/15/05, 1/19/06, 3/28/08

Corporate Medical Affairs Committee Approval Dates: 9/16/04, 4/21/05, 12/15/05, 1/19/06, 2/15/07, 3/20/08

Care Management Quality Improvement Committee Approval Dates: 03/27/03, 10/25/01, 12/12/02

**References:**

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8. Popovic S, Pejin D, Uzurov V. A simple model of the optimal time for allogeneic bone marrow transplantation in chronic granulocytic leukemia. Med Pregl 1997 Mar-Apr; 50(3-4) 100-2.
9. Aetna Clinical Policy Bulletins on High Dose Chemotherapy and Stem Cell Transplant. Reviewed March 25, 2005.
10. Milliman Care Guidelines, Ambulatory Care, 12<sup>th</sup> Edition, Allogenic Bone Marrow and Peripheral Blood Stem Cell Transplants (ACG: A-0376), Autologous Bone Marrow and Peripheral Blood Stem Cell Transplants (ACG: A-0375), March 2008.