



# CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

**Subject Stem-Cell Transplantation for Polycythemia Vera**

**Effective Date ..... 3/15/2011**  
**Next Review Date ..... 3/15/2012**  
**Coverage Policy Number ..... 0471**

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## Hyperlink to Related Coverage Policies

Stem-Cell Transplantation for Acute Myelogenous Leukemia  
 Stem-Cell Transplantation for Myelofibrosis  
 Transplant Donor Charges

### INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2011 CIGNA

## Coverage Policy

**CIGNA does not cover hematopoietic stem-cell transplantation (HSCT) for the treatment of polycythemia vera (PV) because it is considered experimental, investigational or unproven.**

## General Background

Polycythemia vera (PV), also called polycythemia rubra vera, is a rare, acquired, chronic myeloproliferative disorder resulting from a mutation to a single hematopoietic stem cell in the marrow (Means, 2009; Leukemia & Lymphoma, 2007). Less common synonyms include splenomegalic polycythemia, Osler disease, polycythemia with chronic cyanosis, and myelopathic polycythemia. PV is classified as a myeloproliferative disorder and is the most common primary polycythemia (Hoffman, 2008). It is characterized by an abnormal increase in the number of red and white blood cells as well as platelets, with red blood cell overproduction being predominant. There is an increase in total blood volume, as well as thrombocytosis and splenomegaly.

Life expectancy is nearly normal in the first decade of the disease. After a number of years, the disease frequently becomes inactive (i.e., spent phase); about 20% of individuals may no longer suffer from the sequelae of excessive red cell production. If the excessive production of red blood cells and platelets can be controlled, prolonged survival usually results; however, the natural history of the disorder is characterized by a lifelong propensity for thrombotic complications and late-onset disease transformation into both myelofibrosis and acute myeloid leukemia (AML) (Tefferi, 2008; Hoffman, 2008). The most frequent cause of mortality is

vascular thrombosis which accounts for one-third of deaths associated with polycythemia vera (PV). Median duration of survival is fifteen years after diagnosis.

Phlebotomy is the cornerstone of treatment for PV and is the only treatment modality that has improved survival in affected patients (Tefferi, 2008). Additional drug therapy depends on the individual's risk for thrombotic complications, such as stroke and cardiovascular events.

### Stem-Cell Transplantation

Hematopoietic stem-cell transplantation (HSCT) has been proposed as a potential treatment for PV; however, transplantation during the polycythemia phase of the disease is rarely appropriate (Hoffman, 2008). For those patients in whom myeloid metaplasia with myelofibrosis develops or the disease evolves to acute myelogenous leukemia (AML), HSCT may be investigated as a possible treatment option at that time. For additional information, please refer to the CIGNA Coverage Policy Stem-Cell Transplantation for Myelofibrosis and/or CIGNA Coverage Policy Stem-Cell Transplantation for Acute Myelogenous Leukemia.

### Literature Review

There are scarce data in the published peer-reviewed scientific literature regarding the safety and effectiveness of HSCT for PV. Studies are limited by uncontrolled design, small participant populations, heterogeneous patient selection criteria, and a lack of long-term outcomes data.

### Professional Societies/Organizations

The Leukemia and Lymphoma Society Fact Sheet on Polycythemia Vera (2007) notes that small numbers of polycythemia vera patients with myelofibrosis, splenomegaly (enlarged spleen), or progressive disease including myelodysplastic syndrome or AML, may be candidates for allogeneic HSCT.

### Summary

There is insufficient evidence in the published peer-reviewed scientific literature to support the safety and effectiveness of hematopoietic stem-cell transplantation (HSCT) for the treatment of polycythemia vera (PV). At this time the role of HSCT has not yet been established for this indication.

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## Coding/Billing Information

**Note:** This list of codes may not be all-inclusive.

### Experimental/Investigational/Unproven/Not Covered:

CPT* Codes	Description
38205	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; allogeneic
38206	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous
38207	Transplant preparation of hematopoietic progenitor cells; cryopreservation and storage
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 within 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

38230	Bone marrow harvesting for transplantation
38240	Bone marrow or blood-derived peripheral stem cell transplantation; allogeneic
38241	Bone marrow or blood-derived peripheral stem cell transplantation; autologous
38242	Bone marrow or blood-derived peripheral stem cell transplantation; allogeneic donor lymphocyte infusions

HCCPS Codes	Description
S2140	Cord blood harvesting for transplantation, allogeneic
S2142	Cord blood-derived stem cell transplantation, allogeneic
S2150	Bone marrow or blood-derived stem cells (peripheral or umbilical), allogeneic or autologous, harvesting, transplantation, and related complications; including pheresis and cell preparation/storage; marrow ablative therapy; drugs; supplies; hospitalization with outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services; and the number of days or pre-and post-transplant care in the global definition

ICD-9-CM Diagnosis Codes	Description
238.4	Neoplasm of uncertain behavior of polycythemia vera

\*Current Procedural Terminology (CPT®) © 2010 American Medical Association: Chicago, IL.

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## Policy History

<u>Pre-Merger Organizations</u>	<u>Last Review Date</u>	<u>Policy Number</u>	<u>Title</u>
CIGNA HealthCare			
Great-West Healthcare			

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