

Policy: MBP 49.0

Section: Medical Benefit Pharmaceutical Policy

Subject: Erythropoietin and Darbepoetin Therapy

Applicable line of business:

Commercial	X	Medicaid	
Medicare	X	ACA	X
CHIP	X		

I. Policy:

Erythropoietin and Darbepoetin Therapy

II. Purpose/Objective:

To provide a policy of coverage regarding Erythropoietin and Darbepoetin Therapy

III. Responsibility:

- A. Medical Directors
- B. Medical Management
- C. Pharmacy Department

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards good medical treatment practiced by the general medical community;
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient

Commercial

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicare

Geisinger Gold Medicare Advantage HMO, PPO, and HMO D-SNP plans are offered by Geisinger Health Plan/Geisinger Indemnity Insurance Company, health plans with a Medicare contract. Continued enrollment in Geisinger Gold depends on contract renewal. Geisinger Health Plan/Geisinger Indemnity Insurance Company are part of Geisinger, an integrated health care delivery and coverage organization.

CHIP

Geisinger Health Plan Kids (GHP Kids) is a Children's Health Insurance Program (CHIP) offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

DESCRIPTION:

Erythropoietin therapy (e.g., EPO, Epogen [epoetin alfa], Retacrit [epoetin alfa-epbx], Procrit [epoetin beta]) and darbepoetin alfa therapy (Aranesp) is used to stimulate red blood cell production in the bone marrow, with the goal of correcting anemia, minimizing the need for transfusion requirements, and improving the anemic insured individual's quality of life.

CRITERIA FOR USE: Requires Prior Authorization by Medical Director or Designee

Erythropoietin therapy is considered medically necessary for commercial, exchange, CHIP, and Medicare lines of business for the following indications when reversible or correctable conditions including but not limited to, vitamin B12 deficiency, hemolysis, iron or folate deficiency, underlying hematological disease, underlying infection or inflammatory process, and blood loss have been ruled out and when all of the indication specific criteria are met.

1. Treatment of symptomatic anemia of chronic renal insufficiency, chronic renal failure, including end stage renal disease either requiring or not requiring dialysis when all of the following criteria are met:
 - For New starts: Hgb less than or equal to 10 g/dL **OR**
 - For Continuation of therapy: Hgb less than 11 g/dL **OR** medical record documentation that the dose will be reduced or interrupted if Hgb is greater than or equal to 11g/dL

AND

- Ferritin greater than or equal to 100 ng/mL or transferrin saturation level greater than or equal to 20%, or a history of chelation therapy for iron
2. Treatment of symptomatic anemia in zidovudine-treated HIV infected insured individuals when all of the following criteria are met:
 - Endogenous erythropoietin levels of 500 mU/mL or less **AND**
 - Ferritin greater than or equal to 100 ng/mL or transferrin level saturation greater than or equal to 20% or a history of chelation therapy for iron **AND**
 - Zidovudine doses of 4200 mg or less per week **AND**
 - Hgb less than or equal to 10 g/dL for new starts **OR** Hgb less than 12 g/dL for continuation of therapy

Treatment should not last longer than 3 months following the discontinuation of zidovudine

3. Treatment of anemia secondary to myelosuppressive chemotherapy in *non-myeloid malignancies when all of the following criteria are met:
 - Hgb less than or equal to 10 g/dL for new starts **OR** Hgb less than 12 g/dL for continuation of therapy **AND**
 - Insured individual is currently on anemia-inducing chemotherapy and there is a minimum of two additional months of planned chemotherapy **AND**
 - Ferritin greater than or equal to 100 ng/mL or transferrin level saturation greater than or equal to 20% or a history of chelation therapy for iron

*Non-myeloid malignancies include all types of carcinoma, sarcoma, melanoma, multiple myeloma, lymphoma and lymphocytic leukemia

4. Treatment of symptomatic anemia secondary to myelodysplastic syndrome (MDS) when all of the following criteria are met:
 - Hgb less than or equal to 10 g/dL for new starts **OR** Hgb less than 12 g/dL for continuation of therapy **AND**
 - Ferritin greater than or equal to 100ng/dL or transferrin level saturation greater than or equal to 20% **OR** a history of chelation therapy for iron **AND**
 - Baseline endogenous erythropoietin levels of 500 mU/mL or less (NCCN Clinical Practice Guidelines in Oncology – Myelodysplastic Syndromes v2.2010)
5. Treatment of symptomatic anemia of chronic disease (rheumatoid arthritis, inflammatory bowel disease, systemic lupus erythematosus, and hepatitis C undergoing treatment) when all of the following criteria are met:
 - Hgb less than or equal to 10g/dL for new starts **OR** less than 12g/dL for continuation of therapy **AND**
 - Ferritin greater than or equal to 100ng/dL or transferrin level saturation greater than or equal to 20% or a history of chelation therapy for iron **AND**

- Insured individual has a severe comorbidity (e.g. severe angina, pulmonary disease, heart failure, cerebrovascular disease causing transient ischemic attacks, lymphoma, myeloma, etc.) **AND**
 - Insured individual's anemia is manifested by impairments such as, but not limited to, exercise intolerance, tachycardia or shortness of breath with minimal activity, or inability to perform activities of daily living
6. Reduction of allogeneic blood transfusion in anemic insured individuals undergoing surgery when all of the following criteria are met:
- Hgb less than 13 g/dL **AND**
 - Ferritin greater than or equal to 100ng/dL or transferrin level saturation greater than or equal to 20% or a history of chelation therapy for iron **AND**
 - Anemia is related to chronic disease state (limited to rheumatoid arthritis, inflammatory bowel disease, systemic lupus erythematosus, and hepatitis C undergoing treatment) **AND**
 - Insured individual is scheduled to undergo elective, non-cardiac, non-vascular surgery in which anticipated blood loss is greater than 2 units and the need for allogeneic blood transfusion is anticipated.

Note: Authorization will be for a duration of 1 month. Request for use beyond 4 weeks will require medical record documentation indicating medical necessity.

Note: Erythropoietin therapy (epoetin alfa) is not indicated for anemic patients who are able and willing to donate autologous blood.

AUTHORIZATION DURATION: Except for the indication of use in anemic surgical patients, approval for Epogen, Retacrit, Procrit or Aranesp therapy will be given for an initial duration of 12 months. Subsequent authorizations will be considered based on the stated criteria.

GENERAL GUIDANCE:

- For continuation of therapy, a repeat Hgb no greater than 3 months old should be submitted.
- In individuals whose Hgb is greater than or equal to 12gm/dL or rises by 1gm/dL in any two-week period, additional doses should be withheld or reduced (Except when being used for reduction of allogeneic blood transfusion in anemic insured individuals undergoing surgery).
- For initiation or continuation of therapy, a ferritin level no greater than 3 months old and/or transferrin saturation level no greater than 6 months old should be submitted.
- The member should receive supplemental iron if serum ferritin is less than 100ng/ml and transferrin saturation is less than 20 percent.

EXCLUSIONS:

Erythropoietin and Darbepoetin therapy is not covered for the following conditions because current clinical data indicates that erythropoietin stimulating agents have been shown to impart either a deleterious effect on the underlying disease, or that the underlying disease increases the risk of adverse effects related to use of erythropoietin stimulating agents. These conditions include but are not limited to:

- Anemia of cancer not related to cancer treatment;
- Anemia related to myelosuppressive chemotherapy when the cancer treatment goal is cure (e.g early stage breast cancer, Hodgkin lymphoma, non-Hodgkin's lymphoma, testicular cancer, Early stage non-small cell lung cancer, small cell lung cancer)
- Anemia associated only with radiotherapy;
- Anemia due to cancer treatment in insured individuals with uncontrolled hypertension;
- Anemia associated with the treatment of acute and/or chronic myelogenous leukemias (CML or AML), or erythroid cancers;
- Anemia in cancer or in cancer treatment due to folate deficiency, iron deficiency, vitamin B-12 deficiency, bleeding, hemolysis, or bone marrow fibrosis;
- Prophylactic use of erythropoietin stimulating agents to prevent chemotherapy-induced anemia;
- Prophylactic use of erythropoietin stimulating agents to reduce tumor hypoxia;
- Erythropoietin-type resistance due to neutralizing antibodies

LINE OF BUSINESS:

Eligibility and contract specific benefit limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy.

REFERENCES:

1. Epogen [prescribing information]. Thousand Oaks, CA: Amgen; April 2024.
2. Retacrit [prescribing information]. Lake Forest, IL: Hospira Inc; June 2024.
3. Procrit [prescribing information]. Horsham, PA: Janssen Products LP; April 2024.
4. Aranesp (darbepoetin alfa) [prescribing information]. Thousand Oaks, CA: Amgen Inc; January 2019.
5. Hematopoietic Growth Factors Version 2.2024. National Comprehensive Cancer Network (NCCN); 2023 Dec 12 [cited 2023 Dec 27]. Available from: https://www.nccn.org/professionals/physician_gls/pdf/growthfactors.pdf

This policy will be revised as necessary and reviewed no less than annually.

Devised: 4/27/07

Revised: 6/2007, 7/2008, 6/2011 criteria updated; 2/2012 (PA defined); 8/2013 (revised criteria), 3/15/16 (revised criteria), 11/20/18 (Retacrit added), 11/15/22 (LOB carve out, mU/mL update, general guidance update), 10/26/23 (Medicaid business segment), 12/31/23 (references added), 10/16/24 (deleted Medicaid business segment, LOB table, taglines)

Reviewed: 4/2014, 1/31/17, 10/31/17, 9/28/18, 11/18/19, 11/16/20, 10/5/21, 10/5/22, 9/17/25

MA UM Committee approval: 12/31/23, 12/31/24, 10/27/25