Erythropoietin Stimulating Agents (ESAs)

**Origination:** June 17, 2009
**Review Date:** September 16, 2015
**Next Review:** September, 2017

**DESCRIPTION of PROCEDURE OR SERVICE**
Erythropoietin, produced mainly in the kidney, is the principal factor regulating red blood cell production. A number for chronic conditions, especially chronic renal failure, result in decreased production of erythropoietin, causing anemia.

The FDA has approved the following distinct drugs for use as synthetic erythropoietin substitutes:

1. Epoetin alfa (Epogen and Procrit) is structurally identical to naturally occurring erythropoietin.
2. Epoetin beta is a man-made form of the human protein erythropoietin for non-ESRD use.
3. Darbepoetin alfa: Binds to the erythropoietin receptor and stimulates erythropoietin. It has a half-life approximately two to three times longer than Epoetin alfa and therefore needs to be administered less often.

**POLICY STATEMENT**
Coverage will be provided for ESAs when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

**BENEFIT APPLICATION**
Please refer to the member’s individual Evidence of Coverage (EOC) for benefit determination. Coverage will be approved according to the EOC limitations if the criteria are met.

Coverage decisions for will be made in accordance with:
- The Centers for Medicare & Medicaid Services (CMS) national coverage decisions;
- General coverage guidelines included in original Medicare manuals unless superseded by operational policy letters or regulations; and
- Written coverage decisions of local Medicare carriers and intermediaries with jurisdiction for claims in the geographic area in which services are covered.

Benefit payments are subject to contractual obligations of the Plan. If there is a conflict between the general policy guidelines contained in the Medical Coverage Policy Manual and the terms of the member’s particular Evidence of Coverage (E.O.C.), the E.O.C. always governs the determination of benefits.
**INDICATIONS FOR COVERAGE**

**PART B COVERAGE CRITERIA:**
A. Preauthorization by the Plan may be required;

B. **Members have one of the FDA approved conditions for ESA treatment;**

AND

C. **Have Symptomatic Anemia or are Transfusion Dependent:**

D. **Approved conditions:**

1) **End Stage Renal Disease (ESRD) ON Dialysis**
   a) Epoetin alpha (EPO) or darbepoetin alfa (DPA) may be a covered service for treatment of anemia when other treatable causes of anemia are identified and treated and the member has a diagnosis of ESRD on Dialysis. **OR**

2) **Chronic Kidney Disease (CKD) NOT on Dialysis:**
   a) Treatment with Epoetin or Darbepoetin when anemia indicated by a hemoglobin (hgb) of 10 gm/dl or less or a hematocrit (hct) of 30% or less at initiation of therapy. The serum creatinine is equal to or greater than 3, creatinine clearance less than 60ml/min, or glomerular filtration rate (GFR) less than 60 ml; **OR**

3) **Indications/ Conditions other than Renal Disease as listed separately below:**
   a) Anemia related to therapy with Zidovudine (AZT) in acquired immunodeficiency syndrome (AIDS) or AIDS related complex (ARC) **(OR)**

   b) Anemia associated with chemotherapeutic medications when medically necessary for a non-cancer diagnosis or following stem cell transplantation and associated immunosuppression. **(OR)**

   c) A diagnosis of Myelodysplastic Syndrome (MDS). Those members with an endogenous erythropoietin level of less than 500 mu/ml are more likely to respond. ESA therapy is indicated for members with a confirmed diagnosis of MDS, when the anemia is asymptomatic, there is a reasonable expectancy of longer survival and therapy is provided in order to end or reduce the need for transfusions. **(OR)**

   d) Anemia of Chronic Disease (Anemia of inflammatory disease) where inflammatory cytokines suppress the endogenous production of
erythropoietin directly and other causes of anemia have been ruled out. Covered chronic diseases include, Rheumatoid Arthritis, Systemic Lupus Erythematosus, Chronic Hepatitis C, Crohn’s Disease and Ulcerative Colitis.

Criteria for Chronic Disease:

1. **At least one of the following (a-d) must be met as well as 2 and 3.**
   a. Low or normal serum iron
   b. Low or normal iron-binding capacity levels
   c. Normal or elevated serum ferritin
   d. Adequate iron stores in bone marrow

2. The pretreatment HCT level is 30% or less and/or the member is transfusion dependent.

3. The pretreatment erythropoietin level is 100μU/ml or less.

4) Prophylactic pre-operative use (V07.8) (Z41.8) for reduction of allogenic blood transfusions prior to elective hip and knee replacement surgery with Epoetin alfa or Darbepoetin alfa:
   - Have an anemia with a hemoglobin between 10 and 13 gm/dl. (this indication requires a lead time of at least 3 weeks prior to surgery);
   - Are not candidates for autologous blood transfusion;
   - Are expected to lose more than 2 units of blood; and
   - Have had a work-up so that their anemia appears to be that of chronic disease.

4) Anemia associated with cancer and related neoplastic conditions.
   a) Members with anemia secondary to myelosuppressive anticancer chemotherapy in solid tumors, multiple myeloma, lymphoma, and lymphocytic leukemia.

**WHEN COVERAGE WILL NOT BE APPROVED UNDER PART B BENEFIT**

When the above criteria are not met.

CMS has determined that treatment is not reasonable and necessary for beneficiaries with certain clinical conditions due to deleterious effects of ESA treatment on their disease or the disease increases the risk for adverse effects.

1. Any anemia in cancer or cancer treatment members due to folate deficiency, B-12 deficiency, iron deficiency, hemolysis, bleeding or bone marrow fibrosis;
2. Anemia associated with treatment of acute and chronic myelogenous leukemias, i.e., CML, AML, or erythroid cancers;
3. The anemia of cancer not related to cancer treatment;
4. Any anemia associated with radiotherapy;
5. Prophylactic use to prevent chemotherapy-induced anemia;
6. Prophylactic use to reduce tumor hypoxia;
7. Members with erythropoietin-type resistance due to neutralizing antibodies; and
8. Anemia due to cancer treatment if members save uncontrolled hypertension.

PART D COVERAGE CRITERIA:
A. Preauthorization by the Plan is required;
   1. If the above criteria are not met for coverage under the Part B benefit, the medication may be covered under Part D if:
      a. The medication is administered for an FDA approved use;
      b. The medication is on a prescription from a physician;
      c. The medication is used and sold in the United States
      d. The medication is used for a medically accepted indication.
      e. The prescription is dispensed from a retail pharmacy (See Special Notes).

BILLING/ CODING/PHYSICIAN DOCUMENTATION INFORMATION
This policy may apply to the following codes. Inclusion of a code in the section does not guarantee reimbursement.

Applicable Codes: J0881, J0882, J0885, J0886, J0887, J0888, J1439, Q4081, Q9976

The Plan 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.

SPECIAL NOTES
If the members take a prescription to retail pharmacy to be filled, the medication may be covered under the Part D benefit.

GLOSSARY OF TERMS

References:
Medical Coverage Policy: Erythropoietin Stimulating Agents (ESAs)


5. MLN Matters MM9127 – Quarterly Update to the End-Stage Renal Disease (ESRD) Prospective Payment System (PPS), effective date: July 1, 2015. Viewed online at www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM9127.pdf on 07/14/2015.

Policy Implementation/Update Information:
Revision Date: New policy June 2009. Revision Date: March 2010. Formatting and minor wording changes August 2012-criteria updated to be consistent with LCD31074.
Revision Date: 09/18/2013; updated policy Title; reformatted; added Peginesatide to ESA covered meds, updated references and added code J0890.
Revision Date: 5/11/2015 Annual Review; updated Description of Procedure OR Service per LCD; minor edits to Indications For Coverage and Non-Coverage per LCD; coding section updated and code for Peginesatide (J0890) removed as it is no longer approved for coverage as of July 1, 2015. October 29, 2015 updated LCD due to ICD-10 update only.

Approval Dates:

Medical Coverage Policy Committee: September 16, 2015

Policy Owner: Jennifer Davis, RN, MHA
Medical Policy Coordinator