**Medical Coverage Policy |** Erythropoiesis-Stimulating Agents for End-Stage Renal Disease

**EFFECTIVE DATE:** 03|01|2005
**POLICY LAST UPDATED:** 6|16|2015

## OVERVIEW
Endogenous erythropoietin (EPO) is a glycoprotein hematopoietic growth factor that regulates hemoglobin levels in response to changes in the blood oxygen concentration. Erythropoiesis-stimulating agents (ESAs) are produced using recombinant DNA technologies and have pharmacologic properties similar to endogenous EPO. The primary clinical use of ESAs is in patients with chronic anemia. The intent of this policy is to define the benefit category for members with end-stage renal disease (ESRD).

## MEDICAL CRITERIA
Not applicable

## PRIOR AUTHORIZATION
Not applicable

## POLICY STATEMENT
Erythropoietin is covered for members with end-stage renal disease (ESRD) who are on dialysis, under their dialysis benefit.

For all other conditions (such as, but not limited to, members who have significant renal insufficiency but who do not yet require dialysis and pre-dialysis members with anemia due to chronic renal insufficiency or all other diagnoses), it is covered under the member's pharmacy benefit when obtained at the pharmacy, or the physician office injectable benefit if given in the physician's office.

## COVERAGE
Benefits may vary between groups and contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for applicable dialysis/pharmacy/physician office injectable benefits/coverage.

### Specialty Pharmacy
For contracts with specialty drug coverage, please refer to the member agreement for benefits and preauthorizations guidelines.

## BACKGROUND
ESAs have been used extensively in patients with anemia due to cancer chemotherapy or renal failure. Initial trials of epoetin alfa and darbepoetin alfa established that these agents effectively increase hemoglobin (Hb) concentrations and decrease the need for blood transfusions. However, these agents also have been associated with increases in thromboembolic events and/or mortality, especially when the target Hb for treatment is higher. These concerns over potential harm from ESAs led the U.S. Food & Drug Administration (FDA) to reassess the risk/benefit ratio and to modify labeled indications. Modifications include treating to a lower target Hb and limiting ESA use in cancer patients receiving myelosuppressive treatment with palliative intent whose Hb concentration is less than 10 g/dL. These additional recommendations have led to more limitations on ESA use and enhanced surveillance systems that are intended to closely monitor and mitigate the risk of adverse events.

Based on these factors, epoetin alfa and darbepoetin alfa may be considered medically necessary for patients with chronic renal failure (CRF). Epoetin alfa and darbepoetin alfa may be considered medically necessary in patients on dialysis and not on dialysis, as well as in pediatric patients with renal disease.

Pegylated (PEG)-epoetin beta is a long-acting epoetin that is FDA approved for patients with anemia due to CRF. Evidence for this indication comprises randomized controlled trials (RCTs) in patients on dialysis or not on dialysis that showed non-inferiority to standard ESAs for correction or maintenance of Hb levels. Meta-analyses in dialysis patients reported no difference in overall mortality, blood transfusions, or adverse events due to hypertension or venous access thrombosis. Based on this evidence, PEG-epoetin beta may be considered medically necessary for treatment of anemia due to CRF. For treatment of anemia due to cancer chemotherapy, 1 phase 2 trial showed increased mortality with PEG-epoetin beta compared with darbepoetin. PEG-epoetin beta is expected to become available in the United States soon.

## CODING

**The following codes are covered under the dialysis benefit:**

J0882 Injection, darbepoetin alfa, 1 mcg (for ESRD on dialysis)
J0886 Injection, epoetin alfa, 1000 units (for ESRD on dialysis)
J0888 Injection, epoetin beta, 1 microgram (for ESRD on dialysis) (new code (01/01/15)
J0890 Injection, peginesatide, 0.1 mg (for ESRD on dialysis)
Q4081 Injection, epoetin alfa, 100 units (for ESRD on dialysis)

**The following codes are covered under the pharmacy or physician office injectable benefit depending on where the item is obtained:**

J0881 Injection, darbepoetin alfa, 1 microgram (non-ESRD use)
J0885 Injection, epoetin alpha, (for non-ESRD use), per 1000 units
J0887 Injection, epoetin beta, 1 microgram (non-ESRD use) (new code 01/01/15)

## RELATED POLICIES

None

## PUBLISHED

Policy Update, August 2015
Policy Update. January 2008
Provider Update., December 2008

## REFERENCES

None