VENTURA COUNTY
HEALTH CARE PLAN

Prior Authorization DRUG Guidelines

OMONTYS® (peginesatide)

Effective Date: 7/24/12
Date Developed: 7/3/12 by Albert Reeves MD
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OMONTYS® is Colony Stimulating Factor; Erythropoiesis-Stimulating Agent (ESA); Growth Factor

Pre-Authorization Criteria:

VCHCP will authorize **OMONTYS®** for FDA indicated treatment of anemia due to chronic kidney disease (CKD) in adult patients on dialysis.

VCHCP requires that **OMONTYS®** be prescribed by a N**ephrologist.**

Dosing: Adult
The recommended dose is 0.04mg/kg once monthly by intravenous (IV) or subcutaneous (SQ) injection.

Administration

May be administered as an I.V. injection or SubQ injection. The I.V. route is generally used for hemodialysis patients; medication is injected via a special access port on the dialysis tubing during the dialysis procedure. Peritoneal dialysis patients should only administer therapy via the SubQ route. For SubQ injections, may inject in either the outer area of the upper arms, the front of the middle thighs, the abdomen (excluding the 2-inch area around the navel), or the upper outer buttocks area. Do not inject in skin that is tender, red, hard, scarred, or bruised.

Warnings/Precautions

Boxed warnings:

- Chronic kidney disease patients: See “Disease-related concerns” below.

Concerns related to adverse effects:

- Allergic reactions: Allergic reactions have been reported (rarely). Discontinue and treat symptoms appropriately in patients who experience serious allergic/anaphylactic reactions.

- Lack/loss of response: Patients with a sudden loss of hemoglobin response should be evaluated for potential causes of decreased response (eg, iron deficiency, infection, bleeding, inflammation). If common causes are excluded, patient should be evaluated for the presence of peginesatide antibodies. During trials, peginesatide-specific binding antibodies were detected rarely (with a higher incidence noted in patients receiving subcutaneous compared to I.V. administration); however, no cases of pure red cell aplasia (PRCA) were observed in studies. Peginesatide is a synthetic, peptide-based erythropoiesis-stimulating agent (ESA) and cross-reactivity of the immune response against either endogenous or recombinant protein-based erythropoietin agents (eg, epoetin, darbepoetin) to peginesatide is unlikely due to the difference in amino acid sequence (Macdougall, 211).

Disease-related concerns:

- Cancer patients: Clinical trials involving ESAs in cancer patients have shown an increased risk of death, MI, and stroke. Peginesatide is not indicated in cancer patients with anemia who do not have chronic kidney disease.

- Chronic kidney disease patients: **[U.S. Boxed Warning]: An increased risk of death, serious cardiovascular events, and stroke were reported in chronic kidney disease (CKD) patients administered ESAs to target hemoglobin levels >11 g/dL; use the lowest dose sufficient to reduce the need for RBC transfusions. An optimal target hemoglobin level, dose, or dosing strategy to reduce these risks have not been identified in clinical trials.** Hemoglobin rising >1 g/dL in a 2-week period may contribute to the risk (dosage reduction recommended). CKD patients who exhibit an inadequate hemoglobin response to ESA therapy may be at a higher risk for cardiovascular events and mortality compared to other patients. Adjustments in dialysis parameters may be needed after initiation of peginesatide. Patients treated with peginesatide may require

increased heparinization during dialysis to prevent clotting of the extracorporeal circuit. Therapy is not appropriate for anemia treatment in CKD patients *not* receiving dialysis.

- Hypertension/cardiovascular disease: Use with caution in patients with a history of hypertension (contraindicated in uncontrolled hypertension) or cardiovascular disease (history or active) and stroke. Blood pressure should be controlled prior to start of (and during) therapy. Monitor closely throughout treatment; reduce or withhold peginesatide if blood pressure becomes difficult to control.

- Perisurgical patients: In clinical trials involving ESAs, an increased risk of death was observed in patients undergoing coronary artery bypass surgery (CABG) and an increased risk of deep vein thrombosis (DVT) was seen in those undergoing orthopedic procedures.

- Seizures: Have been observed in clinical studies with use; use with caution in patients with a history of seizures. Monitor closely for neurologic symptoms during the first several months of therapy.

- Severe anemia or acute blood loss: Due to the delayed onset of erythropoiesis, peginesatide is not recommended for acute correction of severe anemia or as a substitute for emergency transfusion.

Other warnings/precautions:

- Factors impairing erythropoiesis: Prior to treatment, correct or exclude deficiencies of iron, vitamin B_{12}, and/or folate, as well as other factors which may impair erythropoiesis (inflammatory conditions, infections, bleeding).

- Iron supplementation: Prior to and periodically during therapy, iron stores must be evaluated. Supplemental iron is recommended if serum ferritin <100 mcg/L or serum transferrin saturation <20%. Most patients with CKD will require iron supplementation.

REFERENCES

1. Fan Q, Leuther KK, Holmes CP, et al, "Preclinical Evaluation of Hematide, a Novel Erythropoiesis Stimulating Agent, for the Treatment of Anemia," *Exp Hematol*, 2006, 34(10):1303-11. [PubMed 16982323]

2. Macdougall IC, Rossert J, Casadevall N, et al, "A Peptide-Based Erythropoietin-Receptor Agonist for Pure Red-Cell Aplasia," *N Engl J Med*, 2009, 361(19):1848-55. [PubMed 1989127]

3. Macdougall IC, Wiecek A, Tucker B, et al, "Dose-Finding Study of Peginesatide for Anemia Correction in Chromic Kidney Disease Patients," *Clin J Am Soc Nephrol*, 211, 6(11):2579-86. [PubMed 21940838]

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