

Prior Authorization DRUG Guidelines

ARANESP® (darbepoetin alfa)

Effective Date: 7/28/05

Date Developed: 7/12/05 by C. Wilhelmy MD

Last Approval Date: 1/26/16, 1/24/17

Unarchived: 1/22/19

(Archived: 1/1/18, 1/22/19)

Aranesp is a Colony Stimulating Factor, Growth Factor, and Recombinant Human Erythropoietin. It induces erythropoiesis by stimulating the division and differentiation of committed erythroid progenitor cells; induces the release of reticulocytes from the bone marrow into the bloodstream, where they mature to erythrocytes. When administered SubQ or I.V., darbepoetin's half-life is ~3 times that of epoetin alfa concentrations.

Pre-authorization Criteria: anemia due to concurrent myelosuppressive chemotherapy in patients with non-myeloid malignancies receiving a planned minimum of 2 additional months of palliative chemotherapy; anemia due to chronic kidney disease (patients on dialysis and not on dialysis)

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DOSING: ADULTS — Dosing is complex, **refer to table** (below)

; may be administered SQ or IV

NOTE: VCHCP requires that Aranesp be prescribed by a nephrologist, hematologist, or an oncologist.

NOTE: Prior to treatment, correct or exclude deficiencies of vitamin B12 and/or folate, as well as other factors which may impair erythropoiesis (e.g. aluminum toxicity, inflammatory conditions, infections).

1. Recommended Dosing Regimen and Authorization Limit:

Drug	Dosing Regimen	Authorization Limit
Aranesp	<i>Anemia in Chronic Renal Failure</i> The initial dose by subcutaneous or intravenous administration is 0.45 mcg/kg body weight, as a single injection once weekly. Alternatively, in patients not receiving dialysis, an initial dose of 0.75 mcg/kg may be administered subcutaneously as a single injection once every 2 weeks. <u>Maintenance Dose:</u> The dose should be individualized to maintain hemoglobin levels within the range of 10 to 12 gm/dL Dose escalation: If the increase hemoglobin is less than 1 gm/dL over 4 weeks and iron stores are adequate, the dose may be increased by approximately 25% of the previous dose. Dose reduction: If the Hgb increases by more than	<i>Anemia in Chronic Renal Failure</i> 6 Months Continued treatment will be approved every 6 months upon receiving hematocrit (Hct), hemoglobin (Hgb), transferrin and ferritin values Documentation of transferrin saturation greater than or equal to 20% and ferritin greater than or equal to 100 ng/ml within 60 days of the request must be submitted prior to dose increase <i>Chemotherapy-induced Anemia</i> ESA treatment duration for each course of chemotherapy includes the 8 weeks following the final dose of myelosuppressive chemotherapy in a chemotherapy regimen. Documentation of transferrin saturation greater than or equal to 20% and ferritin greater than or equal to 100 ng/ml within 60 days of the request must be

	1.0 gm/dl in a 2-week period, the dose should be decreased by approximately 25% <i>Chemotherapy-induced Anemia</i> <u>Starting dose:</u> Is 2.25 mcg/kg SC once weekly or 500 mcg SQ every 3 weeks Therapy should not be initiated at hemoglobin levels greater than or equal to 10 g/dL. <u>Maintenance Dose:</u> The dose should be adjusted for each patient to maintain the lowest hemoglobin level sufficient to avoid RBC transfusion. If Hgb increase is < 1 gm/dL after 6 weeks of therapy, the dose should be increased up to 4.5 mcg/kg. If the Hgb increases by more than 1.0 gm/dL in a 2-week period, the dose should be decreased by approximately 40%. If the Hgb exceeds 12 gm/dL, doses should be temporarily withheld until Hgb falls to 12 gm/dL. Therapy should be reinitiated at a dose approximately 40% below the previous dose. Discontinue if after 8 weeks of therapy there is no response as measured by hemoglobin levels or if transfusions are still required.	submitted prior to dose increase <i>Myelodysplastic syndromes</i> 1 year Documentation of transferrin saturation greater than or equal to 20% and ferritin greater than or equal to 100 ng/ml within 60 days of the request must be submitted prior to dose is increase
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How Supplied:

Single-dose vial (1 mL): 25, 40, 60, 100, 200, 300 mcg; (0.75mL): 150 mcg

Pre-filled syringe: 25 mcg (0.42 mL); 40 mcg (0.4 mL); 60 mcg (0.3 mL); 100 mcg (0.5 mL); 200 mcg (0.4 mL); 300 mcg (0.6 mL); 500 mcg (1 mL)

PRECAUTIONS : Pure red cell aplasia (PRCA; neutralizing antibodies to erythropoietin) and increased risk of seizures (mostly in renal failure patients); exacerbation of hypertension; increased risk of DVT in surgical patients (**not** approved as a substitute for blood transfusions in surgical patients or to treat severe anemia); supplemental iron is recommended if serum ferritin <100 mcg/L or serum transferrin saturation <20%; avoid ethanol (adverse effects on erythropoiesis); exclude or correct deficiencies of vitamin B12 and/or folate, as well as other factors which may impair erythropoiesis

NOTE: Only for treatment of anemia due to concomitant myelosuppressive chemotherapy; not indicated for patients receiving myelosuppressive therapy when the anticipated outcome is cure. Discontinue following the completion of chemotherapy

[US Boxed Warning]: Erythropoiesis-stimulating agents (ESAs) increased the risk of serious cardiovascular events, myocardial infarction, stroke, venous thromboembolism, vascular access thrombosis, and mortality in clinical studies when administered to target hemoglobin levels >11 g/dL (and provide no additional benefit); a rapid rise in hemoglobin (>1 g/dL over 2 weeks) may also contribute to these risks.

[US Boxed Warning]: A shortened overall survival and/or increased risk of time to tumor progression or recurrence has been reported in studies with breast, cervical, head and neck, lymphoid, and non–small cell lung cancer patients.

[US Boxed Warning]: An increased risk of death, serious cardiovascular events, and stroke was reported in chronic kidney disease patients administered ESAs to target hemoglobin levels ≥ 11 g/dL

NOTE:

To decrease these risks, and risk of cardio- and thrombovascular events, use the lowest dose needed to avoid red blood cell transfusions. Use ESAs in cancer patients only for the treatment of anemia related to concurrent myelosuppressive chemotherapy; discontinue ESA following completion of the chemotherapy course. ESAs are not indicated for patients receiving myelosuppressive therapy when the anticipated outcome is curative.

[US Boxed Warning]: Because of the risks of decreased survival and increased risk of

tumor growth or progression, health care providers and hospitals must enroll and comply with the ESA APPRISE Oncology Program to prescribe or dispense ESAs to cancer patients.

Drug Interactions: few listed; refer to product literature

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Revision History:

Date Revised: 10/1/11 by A. Reeves, MD

Date Reviewed/No Updates: 4/2/12; 1/16/13 by A. Reeves, MD

Date Approved by P&T Committee: 7/28/05; 10/25/11; 4/24/12; 1/29/13

Date Reviewed/No Updates: 1/28/14 by C. Sanders MD
 Date Approved by P&T Committee: 1/28/14
 Date Reviewed/No Updates: 1/13/15 by C. Sanders, MD
 Date Approved by P&T Committee: 1/27/15
 Date Revised: 9/17/15 by R. Sterling, MD
 Date Reviewed/Updated: 9/17/16 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/26/16
 Date Reviewed/No Updates: 1/24/17 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/24/17
 Date Reviewed/Archived: 1/23/18 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/23/18
 Date Reviewed/No Updates/Unarchived: 1/22/19 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/22/19
 Date Reviewed/Archived: 1/22/19 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/22/19

Revision Date	Content Revised (Yes/No)	Contributors	Review/Revision Notes
1/24/17	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/23/18	No	Catherine Sanders, MD; Robert Sterling, MD	Archived – excluded from Formulary effective 1/1/18
1/22/19	Yes	Catherine Sanders, MD; Robert Sterling, MD	Unarchived – Formulary Exclusion – For Exception Review Use Only Annual Review
1/22/19	No	Catherine Sanders, MD; Robert Sterling, MD	Archived – check ESI