

eпоetin alfa

Warnings	Classification erythropoiesis regulating hormone	Alternate Names r-HuEPO-α, EPREX
		erythropoietin (recombinant human), EPO

Indications

- treatment of anemia associated with chronic renal dysfunction
- [Indications and / or prescribing restrictions apply](#)

Reconstitution and Stability

- store in refrigerator; pre-filled syringes may be stored at room temperature for 7 days
- DO NOT SHAKE; do not send via tube system (send by special messenger only)
- protect from light

Compatibility

Preparation and Administration

Administration Route	Approved	Preparation and Administration Instructions	Required Monitoring
Subcutaneous	YES	into upper arms, abdomen, thighs or upper outer areas of buttocks	Basic Monitoring
Intramuscular	NO		
IV direct	YES	<i>preferred route for hemodialysis patients</i> undiluted into the venous cannula; administer over at least 1 minute	Basic Monitoring
IV intermittent	NO		
Continuous IV infusion	NO		

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Dosage

Chronic renal failure:

- initial dose: 50 to 100 units/kg/week IV or subcutaneous, divided one to three times a week
- dose is adjusted in 25% increments every 4 to 6 weeks to target hemoglobin of 95 to 115 g/L , or follow BCPRA anemia protocol

Potential Hazards of Parenteral Administration

- flu-like symptoms; may be alleviated by slowing rate of IV administration
- mild skin rash and pruritus

Important Implications

Contraindications/Cautions

- contraindicated in patients with hypersensitivity to albumin
- caution in patients with uncontrolled hypertension; a rapid rise in hemoglobin (more than 20 g/L in 4 weeks) may be associated with an increased risk of hypertension, hypertensive encephalopathy or seizures (risk is greatest in the first 90 days of therapy)
- Pregnancy/Lactation: refer to Lexicomp or Micromedex

Side effects

- hypertension, headache, fever, cough, arthralgia, pruritus, nausea, vomiting
- pure red cell aplasia (erythroblastopenia) after months to years of treatment in patients with chronic renal failure has been noted, particularly when administered via the subcutaneous route (IV route preferred for hemodialysis patients)

Monitoring

- hemoglobin should be monitored biweekly upon initiation of therapy and after any dose adjustment until stabilization of response (4 to 6 weeks)
- iron stores should be monitored prior to and during therapy; transferrin saturation should be at least 20% and serum ferritin at least 100 mcg/L (in non-hemodialysis patients) and 200 mcg/L (hemodialysis patients)

Other

- increased doses of heparin may be required during hemodialysis to prevent clotting of the artificial kidney
- response to erythropoietin is first noted by an increase in the reticulocyte count within 10 days, followed by increases in the red cell count, hemoglobin and hematocrit, usually within 2 to 6 weeks
- dosage requirements may be less when the drug is administered subcutaneous versus IV