

ERYTHROPOIETIN

Brand names Aranesp, Binocrit, Eprex, Mircera, NeoRecormon, Retacrit

Used in the following combined preparations None

GENERAL INFORMATION

Erythropoietin is a naturally occurring hormone produced by the kidneys; it stimulates the body to produce red blood cells. In medicine, artificially produced erythropoietin is used to treat the anaemia associated with chronic kidney disease and with certain cancer treatments. Erythropoietin is also used to boost the level of red blood cells before surgery. It may also be used as an alternative to blood transfusions in major orthopaedic (bone) surgery.

Erythropoietin has been used by athletes to enhance their performance. However, this is not a recognized use and the drug is banned by sport governing bodies.

Erythropoietin may worsen hypertension (high blood pressure), and blood pressure should therefore be monitored during treatment with the drug.

QUICK REFERENCE

Drug group Kidney hormone (p.98)

Overdose danger rating Low

Dependence rating Low

Prescription needed Yes

Available as generic No

INFORMATION FOR USERS

Your drug prescription is tailored for you. Do not alter dosage without checking with your doctor.

How taken/used



Injection.

Frequency and timing of doses

1–3 x weekly, depending on the product and condition being treated.

Dosage range

Dosage is calculated on an individual basis according to body weight. The dosage also varies depending on the product and condition being treated.

Onset of effect

Active inside the body within 4 hours, but effects may not be noted for 2–3 months.

Duration of action

Some effects may persist for several days.

Diet advice

None. However, if you have kidney failure, you may have to follow a special diet.

Storage

Store at 2–8°C, out of the reach of children. Do not freeze or shake. Protect from light.

Missed dose

Do not make up any missed doses.

Stopping the drug

Discuss with your doctor.

Exceeding the dose

A single excessive dose is unlikely to be a cause for concern. Too high a dose over a long period can increase the likelihood of adverse effects.

SPECIAL PRECAUTIONS

Be sure to tell your doctor if:

- You have high blood pressure.
- You have a long-term liver problem.
- You have previously suffered allergic reactions to any drugs.
- You have peripheral vascular disease.
- You have had epileptic seizures.
- You are taking other medicines.



Pregnancy

Not usually prescribed. Safety in pregnancy not established. Discuss with your doctor.



Breast-feeding

Safety not established. Discuss with your doctor.



Infants and children

Reduced dose necessary.



Over 60

No known problems.



Driving and hazardous work

Not applicable.



Alcohol

Follow your doctor's advice regarding alcohol.

POSSIBLE ADVERSE EFFECTS

The most common effects are increased blood pressure and problems at the site of the

injection; all unusual symptoms should be discussed with your doctor immediately.

Symptom/effect	Frequency		Discuss with doctor		Stop taking drug now	Call doctor now
	Common	Rare	Only if severe	In all cases		
Increased blood pressure	●			●		
Problems at injection site	●			●		
Flu symptoms/bone pain		●		●		
Epileptic seizures		●		●		●
Skin rash		●		●		
Headache (stabbing pain)		●		●		●

INTERACTIONS

Ciclosporin Erythropoietin may affect the blood level of ciclosporin and more frequent monitoring of ciclosporin blood levels should therefore be carried out when erythropoietin treatment starts.

PROLONGED USE

If the level of anaemia is overcorrected, there is an increased risk of thrombosis, which is potentially fatal, hence the need for careful monitoring. Prolonged use of erythropoietin may also reduce survival in some patients with cancer.

Monitoring Regular blood tests to monitor blood composition and blood pressure monitoring are required.