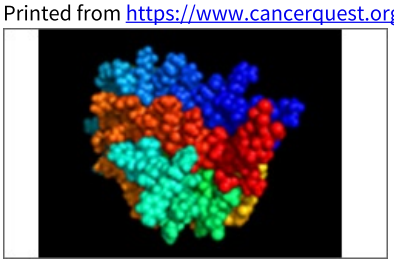
Epoetin Alfa

Printed from https://www.cancerquest.org/zh-hans/geihuanzhe/yaowuxinxi/epoetin-alfa on 11/22/2026



Brand name: Procrit®
Brand name: Epogen®
IUPAC: Human erythropoietin
FDA approval: Yes
Manufacturer Link
Usage:

Chemotherapy drugs attack all fast dividing cells, both cancerous and normal, such as the gastrointestinal tract and bone marrow stem cells. Red blood cells are formed in bone marrow and with its depletion anemia, low red blood cell count, arises as a common side effect of chemotherapy. Depletion of red blood cells results in a decrease in the body's ability to transport oxygen in the blood from the lungs to other cells of the body. An insufficient oxygen supply to the body's tissues prevents the them from functioning efficiently and can result in fatigue that can hinder daily activity. Epoetin alfa (Procrit®, Epogen®) is used to treat this anemia that may arise due to chemotherapy treatment. Epoetin alfa is administered in the form of a regular injection under the skin.1

1 Epogen.. Prescribing Informaiton. Amgen Incorporated. 2015. [http://www.epogen.com]

Mechanism:

The drug stimulates bone marrow cells so that production of red blood cells is sped up. The improved replacement of red blood cells results in an improved energy level. Epoetin is a genetically engineered version of a naturally occurring protein, erythropoietin. Darbepoietin is another synthetic form of erythropoietin.

Stick | Sphere | Rotate

The 3D diagram above shows the molecular structure of Epoetin Alfa.

Side effects:

Side effects are usually mild but may include diarrhea, swelling, fever, vomiting, shortness of breath, tingling, respiratory infections. 1

1 Epogen.. Prescribing Informaiton. Amgen Incorporated. 2015. [http://www.epogen.com]