



Patient & Family Guide

2026

Erythropoiesis-stimulating Agent (ESA) Therapy and Chronic Kidney Disease (CKD)



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What are erythropoiesis-stimulating agents?

- Erythropoiesis-stimulating agents (ESAs) are a group of medications that help replace a hormone called **erythropoietin** (EPO).
- EPO is a hormone released by the kidneys that tells your bone marrow to make more red blood cells. Red blood cells carry oxygen to all of the tissues in your body.
- When your kidneys do not release enough EPO, your body does not make enough red blood cells. When you do not have enough red blood cells, your body may not get enough oxygen. You may feel tired, weak, or short of breath.
- Darbepoetin alfa (Aranesp®) and epoetin alfa (Eprex®) are ESAs that are injected into your body.

Why do I need to take this medication?

- If you have CKD, your kidneys may not release enough EPO to tell your bone marrow to make enough red blood cells.

- This causes your red blood cell count to drop and anemia (not enough red blood cells or hemoglobin in the blood) to develop.
- You may need to take iron for an ESA to work.
 - › Your body needs iron to make hemoglobin, (the part of your red blood cells that carries oxygen).

How do I take this medication?

- Your health care team will do a blood test to check your hemoglobin levels. This will help them decide how much ESA you need and how often you need to take it.
- Both Aranesp® and Eprex® can be given through an intravenous (I.V.) injected into a vein in your arm or hand or subcutaneously (injected under the skin).

Are there any side effects?

- Like all medications, an ESA may cause side effects.
- The most common side effects are:

› Changes in blood pressure	› Headache
› Muscle pain	› Irritation at the injection site
› Diarrhea (loose, watery poop)	(if injected under the skin)

How do I store this medication?

- Talk with your renal team how to store this medication. ESA must be stored between 2 and 8 °C (35.6 and 46.4 °F). **You must keep your ESA at this temperature until you use it.**
- **Do not** freeze ESA.
- If you are travelling, **you must keep your ESA in an insulated container with an ice pack.** Put it in a fridge as soon as possible.
- **Call the Kidney Program for instructions if your ESA has been exposed to a temperature up to 30 °C (86 °F) even once.**
 - › Phone: 902-473-5244
- Store your ESA out of the reach of children and pets.

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

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