

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

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

What are erythropoiesis-stimulating agents?

- Erythropoiesis-stimulating agents (ESAs) are a group of medications that help take the place of a hormone called erythropoietin (EPO).
- EPO is a hormone released by the kidneys telling your bone marrow to make more red blood cells.
- When you do not have enough EPO coming from your kidneys, your body does not make enough red blood cells.
- Red blood cells are important. They carry oxygen to all of the tissues in your body.
- 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 (put) into your body.

Why does someone with CKD need this medication?

- People with CKD may not have enough EPO coming from their kidneys to tell their body to make more red blood cells.

- This causes their 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 ESAs to work.
- Iron is needed 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 measure 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 I.V. injected into a vein in your arm or hand or subcutaneously (injected under the skin).

Are there any side effects?

The most common side effects are:

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| › Changes in blood pressure | › Headache |
| › Muscle pain | › Irritation at the injection site (if given by a needle under the skin) |
| › Diarrhea (loose, watery poop) | |

How do I 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.
- **Do not** use your ESA if it has been at room temperature for more than 24 hours (1 day).
- **Contact the Kidney Program for instructions if your ESA has been exposed to a temperature up to 30 °C (86 °F) even once.**
- Store your ESA out of 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.

Find this pamphlet and all our patient resources here:
<https://library.nshealth.ca/Patients-Guides>

Connect with a registered nurse in Nova Scotia any time:
Call 811 or visit: <https://811.novascotia.ca>

Prepared by: Renal Program
Designed by: Nova Scotia Health Library Services

WQ85-1493 © January 2024 Nova Scotia Health Authority
The information in this pamphlet is to be updated every 3 years or as needed.