

# Anaemia in CKD

Practical bedside approach • Recognition, investigation and treatment

## 01 WHAT IS IT?

- Anaemia becomes **more common as eGFR declines**.
- It is usually **normocytic, normochromic and hypoproliferative**, with a low or inappropriately normal reticulocyte count.
- The main mechanism is insufficient renal erythropoietin production; iron deficiency, inflammation, blood loss and shortened red-cell survival also contribute.
- **Macrocytosis and a high reticulocyte count are not typical** and should prompt investigation for another cause.

## 02 WHAT SHOULD WE CHECK?

- Start with **full blood count, reticulocytes, ferritin and transferrin saturation (TSAT)**.
- Investigate bleeding, inflammation, vitamin B12 or folate deficiency and haemolysis when indicated.
- Do not automatically attribute every low haemoglobin result to CKD.

## 03 HOW DO WE TREAT IT?

- **Correct reversible causes first**, particularly iron deficiency and blood loss.
- Give **oral or intravenous iron** according to iron status, tolerance and response; intravenous iron is preferred in haemodialysis.
- Consider an **erythropoiesis-stimulating agent (ESA)**, such as epoetin or darbepoetin, if anaemia persists after correcting reversible causes.
- In dialysis, ESA initiation is generally considered at **Hb  $\leq$  9–10 g/dL**; in non-dialysis CKD, individualise the decision according to symptoms and benefits and risks.
- Use the lowest effective ESA dose and maintain Hb **below 11.5 g/dL**, rather than normalising it.
- Oral **HIF-prolyl hydroxylase inhibitors** are alternatives in selected patients; ESAs remain first-line.
- Reserve transfusion for situations requiring rapid correction or when other treatments are unsuitable; avoid unnecessary transfusions in potential transplant recipients because of sensitisation.
- Monitor Hb, iron status, blood pressure and treatment response.

## REFERENCES

KDIGO. Clinical Practice Guideline for the Management of Anemia in Chronic Kidney Disease. Kidney Int. 2026;109(Suppl 1S):S1–S99.

---

**Marta Serwańska-Świątek, MD, PhD** • Prepared and approved

Department of Transplantation Medicine, Immunology, Nephrology and Internal Medicine  
Medical University of Warsaw • Contact: marta.sweranska-swietek@wum.edu.pl • Updated: October 2026