

The Facts about Anemia and Anemia Management for Patients with Chronic Kidney Disease (CKD)

- **Patients with CKD either on dialysis or not on dialysis often require treatment for anemia.**
 - Anemia is a low level of red blood cells.
 - Patients with kidney disease often have anemia because their kidneys do not produce enough of the hormone erythropoietin. This hormone stimulates red blood cell production. Anemia is common in patients with CKD, and is almost universal in patients with stage 5 CKD who are on dialysis.
 - Anemia is a significant condition that leads to symptoms including severe fatigue, dizziness, poor appetite, lack of clear thinking, rapid heartbeat, shortness of breath, and depression.
- **Erythropoietin Stimulating Agents (ESAs) with iron replacement therapy are the best treatment options for patients with kidney failure and anemia.**
 - Anemia is managed with an appropriate combination of iron supplements and erythropoietin stimulating agents (ESAs—often referred to as EPO).
 - The introduction of ESAs to treat anemia in patients with renal disease has dramatically improved patient quality of life. In addition, patients no longer have to be transfused on a regular basis. Before ESAs were available, patients commonly received red blood cell transfusions, which carried the risks of infection, iron overload, and potentially reducing the chances of receiving a kidney transplant.
 - Given the major loss of blood inherent with dialysis, ESA treatment sustains the hemoglobin level and allows patients to have higher levels of energy. As a result, patients are able to engage more in normal daily activities, including preparing a meal, working or volunteering, attending school, managing a household, raising children, etc.
 - In addition, their clinical conditions, such as rapid heartbeat, shortness of breath, and lack of clear thinking, often improve significantly.
 - Proper care of anemia helps patients live a better quality of life.
 - Proper anemia management is one of the most important advances in the care of patients with CKD since the development of the dialysis procedure.

An illness is too demanding when you don't have hope!

Renal Support Network

- **Patients' hemoglobin levels should be maintained between 11 and 12 g/dL.**
 - RSN believes that patient safety is paramount, and that safety concerns should be balanced with the potential benefit of a therapy.
 - EPO remains the best treatment for anemia in patients with CKD.
 - Based on the newest safety data, RSN agrees with the latest recommendation from the National Kidney Foundation's Kidney Dialysis Outcomes Quality Initiatives (KDQOI™) panel of experts that calls for targeting patients' hemoglobin levels (the blood test used to measure anemia) between 11 and 12 g/dL.
 - This level of hemoglobin has been shown to improve patient quality of life, which is extremely important to patients with CKD.
 - In making this recommendation, the KDOQI™ states that actual Hb levels may fluctuate to above or below this target range because of natural variations in Hb.
 - KDOQI™ also recommends that Hb levels should be kept below 13 g/dL. Clinical studies have reinforced this range, by finding that patients with a target Hb ≥ 13 g/dl may experience cardiovascular problems and an increased risk of death (note that many of these studies were conducted in patients with cancer or in patients with CKD who were not on dialysis).
 - No studies have demonstrated these safety issues when targeting patient's hemoglobin levels within the current recommended range, or that a temporary increase in Hb to over 12 g/dL is associated with negative effects.
 - In its most recent report, CMS found that 83 percent of all patients with ESRD had a mean hemoglobin ≥ 11 g/dL and that the mean hemoglobin for patients was within the 11-12 range.
- **Patient's with CKD want safe therapies without sacrificing the quality of life benefits associated with appropriate hemoglobin levels**
 - Patients with CKD, especially those on dialysis, are exposed to conditions that make their anemia significantly different than patients with cancer (e.g., ongoing need for ESA therapy versus temporary need for those with cancer, ongoing blood loss from the dialysis procedure, etc.).
 - Patients want to make sure that the progress in anemia outcomes that has been made over the past two decades is not reversed.
 - Patients want to make sure that the therapies they receive are being administered safely, but also do not want to sacrifice the quality of life benefits associated with an appropriate hemoglobin, or run the risk of an increase in blood transfusions if Hb levels are kept inappropriately low.