

Submission No.: PG05-9135

Session Title: PG Education 5 (CKD)

Date &amp; Time, Place: April 27 (Thu), 13:00 - 14:30, Room 1+2

## Updates in Anemia Management in CKD

Sungjin Chung

College of Medicine, The Catholic University of Korea, Korea, Republic of

Several guidelines including the 2012 Kidney Disease: Improving Global Outcomes (KDIGO) and the 2015 National Institute for Health and Care Excellence (NICE) guidelines have provided recommendations on the diagnosis and treatment of anemia in chronic kidney disease (CKD) for a long time. Since new experimental and clinical data on diagnostic methods and novel anemia therapies have been released in recent years, there is the need for guideline updates on optimal management of renal anemia. Of all those, important issues which attracts our attention are the following: first, novel serum biomarkers to differentiate types of renal anemia in patients in CKD have been suggested. For example, reticulocyte hemoglobin content, percentage of hypochromic red blood cells, hepcidin, and erythroferrone may be proposed as reliable biomarkers of iron-deficiency anemia in CKD. Second, there has been a discussion on the potential risks and benefits of the proactive, high-dose iron supplementation in patients with CKD. A more liberal approach to iron supplementation would be safe and effective than previously thought. Third, although the cardiovascular safety of hypoxia-inducible factor-prolyl hydroxylase inhibitors (HIF-PHIs) is still a matter of debate, achievement of lower plasma erythropoietin levels and anti-inflammatory effects with HIF-PHIs may be of clinical benefit. Finally, other new therapeutic strategies such as Inhibitors of hepcidin or IL-6, ferroportin stabilizer, antiferroportin monoclonal antibody and SGLT2 inhibitors are currently being investigated. With the advent of such new strategies for renal anemia, the combination of multiple therapeutic approaches and the development of individualized treatment options for renal anemia will be available, leading to improvement in clinical outcomes of CKD.