



## Chronic Kidney Disease-Mineral and Bone Disorder: Translating Evidence Into Practice

### **Salient changes in the new CKD-MBD 2017 KDIGO guidelines:**

KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention, and Treatment of Chronic Kidney Disease-Mineral and Bone Disorder (CKD-MBD)

**Link:** <http://kdigo.org/wp-content/uploads/2017/02/2017-KDIGO-CKD-MBD-GL-Update.pdf>

Ketteler M, Block GA, Evenepoel P, et al. Executive summary of the 2017 KDIGO Chronic Kidney Disease—Mineral and Bone Disorder (CKD-MBD) Guideline Update: what's changed and why it matters. *Kidney Int.* 2017;92:26-36. doi: 10.1016/j.kint.2017.04.006.

**Link:** [http://www.kidney-international.org/article/S0085-2538\(17\)30249-1/fulltext](http://www.kidney-international.org/article/S0085-2538(17)30249-1/fulltext)

### **Understanding the new findings in the pathogenesis of CKD-MBD:**

Hruska KA, Sugatani T, Agapova O, Fang Y. The chronic kidney disease — Mineral bone disorder (CKD-MBD): Advances in pathophysiology. *Bone.* 2017;100:80-86. doi: 10.1016/j.bone.2017.01.023.

**Link:** <http://www.sciencedirect.com/science/article/pii/S8756328217300236>

### **Approaches to decreasing Npt2b expression:**

Ginsberg C, Ix JH. Nicotinamide and phosphate homeostasis in chronic kidney disease.

*Curr Opin Nephrol Hypertens.* 2016;25(4):285-91. doi: 10.1097/MNH.0000000000000236.

**Link:** <http://www.ingentaconnect.com/content/wk/mnh/2016/00000025/00000004/art00005?crawler=true>

**Review of IV calcimimetic etelcalcetide and oral calcimimetic cinacalcet on serum parathyroid hormone (PTH) concentrations in patients receiving hemodialysis:**

Block GA, Bushinsky DA, Cheng S, et al. Effect of Etelcalcetide vs Cinacalcet on Serum Parathyroid Hormone in Patients Receiving Hemodialysis With Secondary Hyperparathyroidism: A Randomized Clinical Trial. *JAMA.* 2017;317(2):156-164. doi: 10.1001/jama.2016.19468.

**Link:** <http://jamanetwork.com/journals/jama/article-abstract/2596294>

**Review of IV calcimimetic etelcalcetide compared with placebo on serum parathyroid hormone (PTH) concentrations in patients receiving hemodialysis:**

Block GA, Bushinsky DA, Cunningham J, et al. Effect of Etelcalcetide vs Placebo on Serum Parathyroid Hormone in Patients Receiving Hemodialysis With Secondary Hyperparathyroidism: Two Randomized Clinical Trials. *JAMA.* 2017;317(2):146-155. doi: 10.1001/jama.2016.19456.

**Link:** <http://jamanetwork.com/journals/jama/article-abstract/2596293>

### **Results of meta-analysis of sevelamer and its effects on cardiovascular calcification in patients with CKD:**

Wang C, Liu X, Zhou Y, et al. New Conclusions Regarding Comparison of Sevelamer and Calcium-Based Phosphate Binders in Coronary-Artery Calcification for Dialysis Patients: A Meta-Analysis of Randomized Controlled Trials. *PLOS ONE.* 2015;10(7):e0133938. doi: 10.1371/journal.pone.0133938.

**Link:** <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133938>



**Review of ferric citrate as an option among phosphate binders:**

Van Buren PN, Lewis JB, Dwyer JP, et al. The Phosphate Binder Ferric Citrate and Mineral Metabolism and Inflammatory Markers in Maintenance Dialysis Patients: Results From Prespecified Analyses of a Randomized Clinical Trial. *Am J Kidney Dis.* 2015;66(3):479-88. doi: 10.1053/j.ajkd.2015.03.013.

**Link:** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4868355/>

**The effects of tenapanor on serum phosphate concentration in patients with hyperphosphatemia receiving hemodialysis:**

Block GA, Rosenbaum DP, Leonsson-Zachrisson M, et al. Effect of Tenapanor on Serum Phosphate in Patients Receiving Hemodialysis. *J Am Soc Nephrol.* 2017;28(6):1933-1942. doi: 10.1681/ASN.2016080855.

**Link:** <http://jasn.asnjournals.org/content/early/2017/02/02/ASN.2016080855.long>

**The effect of ER calcifediol:**

Sprague SM, Crawford PW, Melnick JZ, et al. Use of Extended-Release Calcifediol to Treat Secondary Hyperparathyroidism in Stages 3 and 4 Chronic Kidney Disease. *Am J Nephrol.* 2016;44(4):316-325.

**Link:** <https://www.karger.com/Article/Abstract/450766>