

## IN BRIEF

**CHRONIC KIDNEY DISEASE****Skin sodium linked to left ventricular hypertrophy**

New data suggest a link between skin sodium content and left ventricular hypertrophy in patients with chronic kidney disease (CKD). Sodium levels in the skin of the calves of 99 patients with mild-to-moderate CKD correlated with both systolic blood pressure (BP) and left ventricular mass (LVM). Moreover skin sodium correlated more strongly with LVM than did total body overhydration (TBOH), and TBOH did not correlate with systolic BP. Linear regression analyses showed that skin sodium was an explanatory variable for LVM independent of BP and TBOH. The researchers suggest that reducing skin sodium content might improve cardiovascular outcomes in CKD.

**ORIGINAL ARTICLE** Schneider, M. P. *et al.* Skin sodium concentration correlates with left ventricular hypertrophy in CKD. *J. Am. Soc. Nephrol.* <http://dx.doi.org/10.1681/ASN.2016060662> (2017)

**STONES****A novel approach to stone prevention in cystinuria**

The nutritional supplement  $\alpha$ -lipoic acid could be a potential therapy for the prevention of cystine urolithiasis say researchers. Cystinuria is characterized by recurrent stone formation as a result of defective urinary cystine reabsorption and the effectiveness of current therapies for stone prevention is limited. Now, Zee *et al.* report that  $\alpha$ -lipoic acid strongly suppressed stone growth in a mouse model of cystinuria. They found that this treatment — which is widely available and has few adverse effects — increased the solubility of cystine in the urine of these mice compared with untreated controls.

**ORIGINAL ARTICLE** Zee, T. *et al.*  $\alpha$ -Lipoic acid prevents cystine urolithiasis in a mouse model of cystinuria. *Nat. Med.* <http://dx.doi.org/10.1038/nm.4280> (2017)

**DIALYSIS****Efficacy of tenapanor in hyperphosphataemia**

Researchers report that tenapanor — a small molecule inhibitor of the sodium/hydrogen exchanger isoform 3 — reduces serum phosphate levels in patients with hyperphosphataemia receiving haemodialysis. In this double-blind trial, 162 patients underwent washout of phosphate binders before being randomly assigned to receive either tenapanor or placebo for 4 weeks. Tenapanor treatment resulted in significant dose-dependent reductions in serum phosphate levels from baseline. The most common adverse event was diarrhoea.

**ORIGINAL ARTICLE** Block, G. A. *et al.* Effect of tenapanor on serum phosphate in patients receiving haemodialysis. *J. Am. Soc. Nephrol.* <http://dx.doi.org/10.1681/ASN.2016080855> (2017)

**VASCULITIS****Aberrant glycosylation alters MPO antigenicity**

Antibodies against aberrant glycosylated myeloperoxidase (MPO) have been identified in the sera of 21 of 40 patients with anti-glomerular basement membrane (GBM) disease who did not have MPO-antineutrophil cytoplasmic antibody. Binding of these new antibodies to aberrant glycosylated MPO was not inhibited by intact MPO or GBM antigen. They belonged to the IgG1 subclass and were able to activate complement and induce neutrophil degranulation *in vitro*. The researchers conclude that aberrant glycosylation alters MPO antigenicity by exposing neo-epitopes and that antibodies against aberrant glycosylated MPO might contribute to kidney damage in vasculitis.

**ORIGINAL ARTICLE** Ju, J. *et al.* Deglycosylation of myeloperoxidase uncovers its novel antigenicity. *Kidney Int.* <http://dx.doi.org/10.1016/j.kint.2016.12.012> (2017)