

IN BRIEF

GENETICS

Recessive mutations in the *NPHS2* gene, which encodes podocin, are generally thought to cause steroid-resistant nephrotic syndrome that begins in childhood. However, Machuca *et al.* have now shown that a combination of compound heterozygosity for the R229Q polymorphism (previously considered innocuous) and a pathogenic mutation in the gene is associated with adult-onset steroid-resistant nephrotic syndrome, especially in patients of European or South American origin.

Original article Machuca, E. *et al.* Clinical and epidemiological assessment of steroid-resistant nephrotic syndrome associated with the *NPHS2* R229Q variant. *Kidney Int.* **75**, 727–735 (2009).

ANEMIA

In a phase III trial in patients on hemodialysis who had anemia, a 1-week course (two 510 mg doses) of intravenous ferumoxytol—an iron oxide nanoparticle coated with a low-molecular-weight carbohydrate—increased hemoglobin concentration and transferrin saturation more effectively than a 3-week course (200 mg per day) of oral elemental iron. The two treatments had similar adverse event profiles.

Original article Provenzano, R. *et al.* Ferumoxytol as an intravenous iron replacement therapy in hemodialysis patients. *Clin. J. Am. Soc. Nephrol.* **4**, 386–393 (2009).

MINERAL METABOLISM

Administration of etidronate or pamidronate to rats with renal failure reduces aortic calcification but also suppresses bone formation, report US researchers. Bone resorption is largely unaffected. These results suggest that the anticalcifying properties of bisphosphonates could be of limited value in the setting of kidney disease, as any reductions in vascular calcification might come at the cost of impaired bone mineralization.

Original article Lomashvili, K. A. *et al.* Effect of bisphosphonates on vascular calcification and bone metabolism in experimental renal failure. *Kidney Int.* **75**, 617–625 (2009).

TRANSPLANTATION

A series of 10 ‘domino’ transplantations involving six centers in five states has been successfully completed in the US. The chain was initiated by an altruistic kidney donor without a designated recipient. Five of the donors underwent surgery at the same time as their coregistered recipient, but the remaining five ‘bridge’ donors were not required to donate until up to 5 months after their coregistered recipients had received transplants. Despite this interval, no donor backed out.

Original article Rees, M. A. *et al.* A nonsimultaneous, extended, altruistic-donor chain. *N. Engl. J. Med.* **360**, 1096–1101 (2009).