

## IN BRIEF

**ACUTE KIDNEY INJURY****Large burden of acute kidney injury in China**

Acute kidney injury (AKI) is a major health problem in China say researchers. Based on their analysis of data from 44 hospitals, Yang *et al.* estimated that 1.4–2.9 million people with AKI were admitted to hospital in China in 2013, but 74.2% of these cases were not recognized. Moreover, only 21.4% of patients with an AKI diagnosis were referred to a renal specialist. Among the referred patients, only 59.3% of those with indications for renal replacement therapy received this treatment. Delayed recognition of AKI was an independent risk factor for in-hospital mortality, whereas renal referral reduced the risks of AKI under-recognition and mortality.

**ORIGINAL ARTICLE** Yang, L. *et al.* Acute kidney injury in China: a cross-sectional survey. *Lancet* **386**, 1465–1471 (2015)

**AUTOIMMUNITY****Aberrant regulation of gene expression in systemic lupus erythematosus**

Systemic lupus erythematosus (SLE) is a clinically and genetically heterogeneous disease. A recent genome-wide association study, which included 7,219 patients, identified 43 susceptibility loci for SLE, including 10 new associations. As transcription factors were over-represented among the SLE susceptibility genes, the researchers state that their data supports the hypothesis that aberrantly regulated gene expression networks in innate and adaptive immune cells contribute to the risk of developing this disease.

**ORIGINAL ARTICLE** Bentham, J. *et al.* Genetic association analyses implicate aberrant regulation of innate and adaptive immunity genes in the pathogenesis of systemic lupus erythematosus. *Nat. Genet.* doi:10.1038/ng.3434

**BASIC RESEARCH****Acid sensing in the collecting duct**

Chronic acidosis has previously been shown to induce an increase in acid-secreting  $\alpha$ -intercalated cells and a decrease in  $\text{HCO}_3^-$ -secreting  $\beta$ -intercalated cells in the cortical collecting duct (CCD), resulting in a net increase in CCD acid secretion. Now, Schwartz *et al.* report that the principal cells of the CCD are the sensors of acid levels. Using isolated CCDs, transgenic mice and cultured principal cells, they showed that these cells respond to acid by upregulating stromal cell-derived factor 1, which induces the change in intercalated cell subtype distribution that occurs in response to chronic acidosis.

**ORIGINAL ARTICLE** Schwartz, G. J. *et al.* SDF1 induction by acidosis from principal cells regulates intercalated cell subtype distribution. *J. Clin. Invest.* doi:10.1172/JCI80725

**DIABETES****Renal complications and excess mortality in type 2 diabetes mellitus**

Renal complications are an important contributor to excess mortality in patients with type 2 diabetes mellitus (T2DM), according to new findings. Tancredi *et al.* showed that 17.7% of patients with T2DM who were registered in the Swedish National Diabetes Register on or after 1 January 1998 died during a mean follow-up of 4.6 years, compared to 14.5% of matched individuals from the general population who were followed for a mean of 4.8 years. Excess mortality increased with younger age, worsening glycaemic control and greater severity of renal complications.

**ORIGINAL ARTICLE** Tancredi, M. *et al.* Excess mortality among persons with type 2 diabetes. *N. Engl. J. Med.* **373**, 1720–1732 (2015)