and efficacy of CYT006-AngQb—a vaccine comprising angiotensin II conjugated to recombinant virus-like particles—in 72 patients with mild to moderate hypertension.

Patients were randomized on a 1:1:1 basis to receive 100 μg of CYT006-AngQb, 300 μg of CYT006-AngQb, or placebo, by subcutaneous injection at weeks 0, 4 and 12. All patients underwent 24 h ambulatory blood pressure (BP) measurement before treatment and at week 14. After the first injection, high IgG titers against angiotensin II were seen in all participants receiving vaccine. Following the third injection, the average half-life of the IgG response was 17 weeks. At week 14, the magnitude of reduction from baseline in mean daytime ambulatory BP was significantly greater in the 300 μg group than in the control group ($P = 0.012$ for systolic and $P = 0.024$ for diastolic BP). In addition, in comparison with those in the control group, patients who received CYT006-AngQb at the higher dose had a lower early-morning BP surge. Most of the adverse effects reported were mild injection-site reactions, and there were no serious treatment-related adverse events. The authors conclude that immunization with 300 μg of CYT006-AngQb shows efficacy and has an acceptable safety profile.

Original article Tissot AC *et al.* (2008) Effect of immunisation against angiotensin II with CYT006-AngQb on ambulatory blood pressure: a double-blind, randomised, placebo-controlled phase IIa study. *Lancet* **371:** 821–827

Low blood pressure does protect against stroke in CKD

Although lowering of blood pressure is generally associated with a reduced risk of stroke, observational studies have suggested that patients with chronic kidney disease (CKD) who have systolic blood pressure (SBP) <120 mmHg might have an increased risk of stroke. However, an analysis of data from PROGRESS, a trial that investigated the effect on stroke prevention of treatment with the angiotensin-converting-enzyme inhibitor perindopril in patients with prior stroke, has found a continuous direct relationship between lower SBP and reduced risk of stroke in CKD.

Ninomiya *et al.* analyzed the effect of perindopril versus placebo in 6,071 patients with previous cerebrovascular disease, of whom 1,695 had stage 3 CKD and 62 had stage 4 CKD. Perindopril reduced the risk of recurrent stroke by ~30% compared with placebo, both in patients with CKD and those without. Stratification of patients by baseline SBP showed that the effect of perindopril on stroke risk was similar for patients with SBP values of <140 mmHg, 140–159 mmHg, and ≥160 mmHg in both the CKD and the non-CKD groups. Following adjustment for age, sex, and other risk factors, a log-linear relationship was found between follow-up SBP level and stroke risk both for patients with and those without CKD.

The authors conclude that low blood pressure targets, including that of <120/80 mmHg, do not seem to be associated with increased risk of recurrent stroke in patients with CKD and are actually more likely to protect against recurrent stroke in such patients.

Original article Ninomiya T *et al.* (2008) Lower blood pressure and risk of recurrent stroke in patients with chronic kidney disease: PROGRESS trial. *Kidney Int* **73:** 963–970

Rituximab is effective against lupus nephritis in children

Long-term use of toxic immunosuppressive therapies for lupus nephritis could have particularly serious consequences in children. Nwobi *et al.* retrospectively assessed the safety and efficacy of the anti-B-cell monoclonal antibody rituximab in children at their US center who had lupus nephritis.

The study population comprised 18 children (mean age at diagnosis 10.7 years; 2 male), of whom 3 were on hemodialysis. All patients received corticosteroids and hydroxychloroquine concurrently with rituximab therapy, which was given weekly for 2–4 weeks. The initial dose of rituximab was a 4 h infusion of 188 mg/m^2; subsequent doses were 6–8 h infusions of 375 mg/m^2. Maintenance doses of mycophenolate mofetil or azathioprine were also administered.

Patients were followed up for 0.5–4.8 years. B-cell depletion occurred within 2 weeks of initiation of rituximab and lasted for 3–12 months. Five patients required multiple courses of rituximab because of relapse. Of the 15 patients not on dialysis, 7 experienced full renal remission and 7 experienced partial remission. Improvements in systemic disease activity scores were seen in all 14 of these patients. The remaining patient died of infectious

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