

Overall, 7 patients (7%) achieved complete remission of proteinuria and 46 (47%) achieved partial remission. Mean  $\pm$  SD time to remission was  $141.5 \pm 61.1$  days. Mean urinary protein excretion decreased from  $5.6 \pm 3.23$  g/day at baseline to  $2.55 \pm 1.06$  g/day after 12 months of MMF treatment ( $P < 0.01$ ). No changes in glomerular filtration rates or serum creatinine levels were observed. Improvements in proteinuria were greatest in patients with good renal function (glomerular filtration rate  $>80$  ml/min/1.73 m<sup>2</sup>) and in those with nephrotic-range proteinuria at baseline (vs non-nephrotic-range proteinuria;  $P < 0.05$  and  $P < 0.001$ , respectively). Gastrointestinal symptoms were the most common type of adverse effect; 8 patients (8.4%) withdrew because of persistent gastrointestinal symptoms.

**Original article** Segarra A *et al.* (2007) Efficacy and safety of 'rescue therapy' with mycophenolate mofetil in resistant primary glomerulonephritis—a multicenter study. *Nephrol Dial Transplant* 22: 1351–1360

## Cinacalcet not cost-effective in secondary hyperparathyroidism

Secondary hyperparathyroidism is common in end-stage renal disease, and the standard treatment, which involves dietary control, phosphate binders and vitamin D supplementation, is not always effective. Cinacalcet is a first-in-class calcimimetic drug that suppresses parathyroid hormone production, thereby reducing serum calcium and phosphate levels. Garside *et al.* developed a Markov state transition model to compare the cost-utility of cinacalcet in combination with standard care with that of standard care alone in a hypothetical cohort of 1,000 patients with hyperparathyroidism secondary to end-stage renal disease.

Compared with standard treatment alone, it was calculated that cinacalcet in combination with standard treatment would provide an additional 0.34 quality-adjusted life years, at a cost of £21,167 (approximately US\$40,908) per patient. This value equates to an incremental cost-effectiveness ratio of £61,890 (approximately \$119,606) per quality-adjusted life year, which exceeds the usual 'willingness to pay' threshold of the National Health Service in the UK. The model predicted few differences in the incidences of major fractures, cardiovascular events and surgical mortality between treatment

regimens, but a significantly lower incidence of parathyroidectomy with cinacalcet use ( $P < 0.001$ ). One-way sensitivity analyses indicated that if the price of cinacalcet was nearly halved, it would be considered cost-effective in the UK.

**Original article** Garside R *et al.* (2007) The cost-utility of cinacalcet in addition to standard care compared to standard care alone for secondary hyperparathyroidism in end-stage renal disease: a UK perspective. *Nephrol Dial Transplant* 22: 1428–1436

## Duplex sonography a useful tool for screening patients with suspected renal artery stenosis

The current reference standard for the diagnosis of renal artery stenosis (RAS) is intra-arterial angiography. No single screening method that identifies patients who require this invasive procedure has been universally accepted. Williams and co-workers, therefore, performed a meta-analysis of studies that compared the accuracy of duplex sonography with that of intra-arterial angiography for the detection of RAS.

The authors selected 88 original articles published in the period 1984–2004, and extracted data on 9,974 renal arteries in 8,147 patients. A range of parameters obtained via duplex sonography were assessed for diagnostic capabilities; these parameters included peak systolic velocity (PSV), acceleration time, acceleration index, and renal–aortic ratio.

PSV was the most accurate test parameter with a sensitivity of 85%, specificity of 92% and a diagnostic odds ratio (OR) of 60.9. The acceleration index was the least accurate test parameter with an OR of 16.0. Acceleration time and renal–aortic ratio had similar diagnostic ORs of 28.9 and 29.3, respectively. Combining PSV with other duplex sonography parameters increased diagnostic accuracy only marginally.

The authors conclude that determining PSV alone using duplex sonography is a useful, inexpensive and noninvasive means of triaging patients in whom RAS is suspected, allowing unnecessary renal angiography to be avoided.

**Original article** Williams GJ *et al.* (2007) Comparative accuracy of renal duplex sonographic parameters in the diagnosis of renal artery stenosis: paired and unpaired analysis. *AJR Am J Roentgenol* 188: 798–811