

**HYPERTENSION**

Divergent results using clinic and ambulatory blood pressures. Report of a darusentan-resistant hypertension trial

Bakris, G. L. *et al. Hypertension* 56, 824–830 (2010)

Use of ambulatory blood pressure monitoring is important in clinical studies investigating hypertension, conclude the authors of a recent trial. George Bakris and co-workers randomly assigned 849 patients who had resistant hypertension (and were on three or more antihypertensive drugs) to placebo, darusentan (a selective endothelin-A-receptor antagonist) or guanfacine (a central  $\alpha_2$  agonist). They found that although clinic-assessed systolic blood pressure did not decrease more with darusentan than with placebo after 14 weeks of treatment, ambulatory blood pressure monitoring showed that mean 24 h systolic blood pressure decreased more with darusentan than with placebo or guanfacine.

**RISK FACTORS**

Low glomerular filtration rate and risk of stroke: meta-analysis

Lee, M. *et al. BMJ* 341, c4249 (2010)

A systematic review and meta-analysis published in the *British Medical Journal* reports that low estimated glomerular filtration rate (eGFR) is independently associated with an increased risk of stroke. The researchers analyzed data from 33 studies that collected data on eGFR and incident stroke; in total, 284,672 individuals were included and 7,863 stroke events occurred. Across a number of study designs and different participants, a baseline eGFR  $<60$  ml/min/1.73 m<sup>2</sup> was associated with an increased risk of incident stroke (relative risk 1.43, 95% CI 1.31–1.57). An eGFR of 60–90 ml/min/1.73 m<sup>2</sup> was not, however, associated with an increased risk of stroke.

**ACUTE KIDNEY INJURY**

Albuminuria and estimated glomerular filtration rate independently associate with acute kidney injury

Grams, M. E. *et al. J. Am. Soc. Nephrol.* 21, 1757–1764 (2010)

An individual's risk of acute kidney injury (AKI) is dependent not only on their estimated glomerular filtration rate (eGFR), but also on their level of albuminuria, say researchers at Johns Hopkins University School of Medicine. Grams and colleagues used data from a cohort of 11,200 individuals in the Atherosclerosis Risk in Communities study to investigate the association of baseline urine-to-creatinine ratio and eGFR with hospitalization for AKI. The relative risk of AKI, adjusted for factors including gender, race, cardiovascular risk factors and eGFR category, increased with increasing urine albumin-to-creatinine ratio.