Nature Reviews Neurology 7, 598 (2011); doi:10.1038/nrneurol.2011.157; doi:10.1038/nrneurol.2011.158; doi:10.1038/nrneurol.2011.159; doi:10.1038/nrneurol.2011.160

# **IN BRIEF**

### ALZHEIMER DISEASE

Benefits of an insulin nasal spray in Alzheimer disease and amnestic mild cognitive impairment

The results of a pilot trial indicate that insulin, delivered intranasally, can preserve or even improve cognition and functional abilities in patients with Alzheimer disease or amnestic mild cognitive impairment. Over a 4-month period, patients receiving a daily 20 IU intranasal dose of insulin exhibited improved delayed memory compared with those receiving placebo, and 20 IU and 40 IU doses were both associated with preserved ability to perform daily functions. The researchers believe that longer trials of this treatment approach are warranted.

Original article Craft, S. et al. Intranasal insulin therapy for Alzheimer disease and amnestic mild cognitive impairment. Arch. Neurol. doi:10.1001/ archneurol.2011.233

## **EPILEPSY**

Schizophrenia and epilepsy are bidirectionally related

Individuals with schizophrenia have a substantially elevated risk of developing epilepsy, and vice versa, according to research based on data from the Taiwan National Health Insurance database. The investigators suggest that the two conditions could have common causes, and they advocate additional studies to identify the underlying mechanisms.

**Original article** Chang, Y.-T. *et al.* Bidirectional relation between schizophrenia and epilepsy: a population-based retrospective cohort study. *Epilepsia* doi:10.1111/j.1528-1167.2011.03268.x

#### STROKE

Comprehensive stroke centers abolish the weekend effect

A retrospective database analysis involving 134,441 patients with stroke has shown that admission to a comprehensive stroke center can eliminate the 'weekend effect'—a phenomenon whereby patients who are hospitalized over the weekend have a heightened risk of death. At primary stroke or nonstroke centers, weekend admission was associated with a higher 90-day all-cause mortality rate than was weekday admission. By contrast, day of admission had no bearing on mortality in patients admitted to comprehensive stroke centers.

Original article McKinney, J. S. *et al.* Comprehensive stroke centers overcome the weekend versus weekday gap in stroke treatment and mortality. *Stroke* 42, 2403–2409 (2011)

#### MOTOR NEURON DISEASE

#### Anatomical spread of amyotrophic lateral sclerosis predicts survival

Amyotrophic lateral sclerosis frequently manifests in a single region of the body, followed by spread to other regions. Research from Japan has now shown that rapid recruitment of a second body region to the disease process is predictive of poor survival. The authors propose that this knowledge could assist in the planning of disease-management strategies, and in the counseling of patients and their families.

**Original article** Fujimura-Kiyono, C. *et al.* Onset and spreading patterns of lower motor neuron involvements predict survival in sporadic amyotrophic lateral sclerosis. *J. Neurol. Neurosurg. Psychiatry* **82**, 1244–1249 (2011)