

## IN BRIEF

**INTRACEREBRAL HAEMORRHAGE****Antidepressants increase risk of microbleeds**

Serotonin-targeting antidepressants are associated with an increased risk of subclinical cerebral microbleeds, according to a study that included 2,559 participants of the Rotterdam Study. Repeated brain MRI was used to assess the incidence of microbleeds over 8 years, and showed that the incidence was higher among individuals who used antidepressants during the study period. Both selective and nonselective serotonin reuptake inhibitors were linked with an increased incidence of microbleeds. Drugs with intermediate affinity for serotonin carried the highest risk.

**ORIGINAL ARTICLE** Akoudad, S. *et al.* Antidepressant use is associated with an increased risk of developing microbleeds. *Stroke* <http://dx.doi.org/10.1161/STROKEAHA.115.011574>

**MULTIPLE SCLEROSIS****Brain volume loss strengthens disease measure**

Including brain volume loss as an additional criterion in the 'no evidence of disease activity' (NEDA) measure of relapsing–remitting multiple sclerosis progression could help to assess neurodegeneration as well as inflammation. NEDA-3, the current form of the measure, is defined as the absence of disease activity on MRI, relapses and the progression of disability. Ludwig Kappos *et al.* updated the measure to NEDA-4 by adding brain volume loss, and applied it to analyse pooled data from two trials of fingolimod. NEDA-4 reduced the proportion of participants who achieved NEDA, but remained sensitive to the benefits of treatment detected with NEDA-3.

**ORIGINAL ARTICLE** Kappos, L. *et al.* Inclusion of brain volume loss in a revised measure of 'no evidence of disease activity' (NEDA-4) in relapsing–remitting multiple sclerosis. *Mult. Scler.* <http://dx.doi.org/10.1177/1352458515616701>

**ALZHEIMER DISEASE****BRCA1 involved in AD-related cognitive deficits**

Analysis of DNA repair factors has revealed that depletion of breast cancer DNA repair factor BRCA1 is associated with Alzheimer disease (AD). BRCA1 dysfunction is known to have a role in breast cancer, and Elsa Suberbielle and colleagues have now shown that BRCA1 levels are low in the brains of people with AD and of mice that are transgenic for the human amyloid precursor protein. In mice, BRCA1 depletion caused cognitive and learning deficits, but not neuronal death. Neuronal activity seemed to regulate BRCA1 levels, and accumulation of amyloid- $\beta$  depleted BRCA1 levels.

**ORIGINAL ARTICLE** Suberbielle, E. *et al.* DNA repair factor BRCA1 depletion occurs in Alzheimer brains and impairs cognitive function in mice. *Nat. Comm.* <http://dx.doi.org/10.1038/ncomms9897>

**MIGRAINE****Hopes raised for effective migraine prophylaxis**

A randomized double-blind placebo-controlled trial suggests that memantine — a drug used to slow down Alzheimer disease — is an effective prophylactic treatment for migraine. The trial included 60 patients with migraine without aura, who were randomly allocated to receive memantine or a placebo. Memantine reduced the frequency of attacks per month, and reduced the number of days patients were absent from work, the severity of headache and disability scores. Adverse effects were minimal; three patients who received memantine experienced sedation, mild vertigo and nausea, and drowsiness.

**ORIGINAL ARTICLE** Noruzzadeh, R. *et al.* Memantine for prophylactic treatment of migraine without aura: a randomized double-blind placebo-controlled study. *Headache* <http://dx.doi.org/10.1111/head.12732>