Nature Reviews Neurology **9**, 183 (2013); published online 19 March 2013;
doi:10.1038/nrneurol.2013.43;
doi:10.1038/nrneurol.2013.44;
doi:10.1038/nrneurol.2013.45;
doi:10.1038/nrneurol.2013.46

IN BRIEF

ALZHEIMER DISEASE

Peripheral clearance of amyloid-β does not reduce brain levels of this peptide

The 'peripheral sink' hypothesis in Alzheimer disease (AD) posits that removal of amyloid-β (Aβ) from the periphery should decrease brain levels of Aβ. In a recent study, Andrew Schumacher and colleagues tested this idea by administering the Aβ-degrading protease neprilysin intravenously to a transgenic mouse model of AD. Although the treatment led to depletion of plasma Aβ, brain levels of this peptide were unchanged, indicating that peripheral Aβ clearance may not be a viable therapeutic option in AD.

Original article Walker, J. R. *et al.* Enhanced proteolytic clearance of plasma Aβ by peripherally administered neprilysin does not result in reduced levels of brain Aβ in mice. *J. Neurosci.* **33**, 2457–2464 (2013)

STROKE

Combination antiplatelet therapy may pose risks to patients with prior ischaemic stroke

Addition of the antiplatelet agent vorapaxar to standard antiplatelet therapy increases the risk of intracranial haemorrhage (ICH) in patients with prior ischaemic stroke, according to research published in *Stroke*. In a randomized, placebo-controlled trial involving 4,883 patients who had experienced an ischaemic stroke 2 weeks to 12 months previously, vorapaxar treatment not only failed to reduce the rate of major vascular events but was also associated with a raised incidence of ICH.

Original article Morrow, D. A. *et al.* Efficacy and safety of vorapaxar in patients with prior ischemic stroke. *Stroke* **44**, 691–698 (2013)

NEUROMUSCULAR DISEASE

Defects in asparagine-linked protein glycosylation implicated in congenital mysathenic syndromes

Mutations in genes encoding components of the asparagine-linked protein glycosylation pathway are associated with congenital myasthenic syndromes (CMSs), a new study reveals. Cossins *et al.* found causative *ALG2* and *ALG14* mutations among a cohort of patients with a form of CMS characterized by limb-girdle myasthenia. The findings are consistent with previous data linking CMS to mutations in *DPAGT1*, which encodes another enzyme involved in asparagine-linked protein glycosylation.

Original article Cossins, J. *et al.* Congenital myasthenic syndromes due to mutations in *ALG2* and *ALG14*. *Brain* **136**, 944–956 (2013)

EPILEPSY

'Skeletal' chloride channel gene variants identified in patients with epilepsy

The chloride channel CIC-1 was originally thought to function largely in skeletal muscle, but findings reported in *Neurology* suggest an additional role in the modulation of neuronal excitability. Jeffrey Noebels and colleagues found widespread expression of the CIC-1-encoding gene *CLCN1* in mouse and human brain tissue, and also discovered *CLCN1* missense variants in a high proportion of patients with sporadic epilepsy.

Original article Chen, T. T. *et al.* Novel brain expression of CIC-1 chloride channels and enrichment of *CLCN1* variants in epilepsy. *Neurology* doi:10.1212/WNL.0b013e31828868e7