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## IN BRIEF

### MULTIPLE SCLEROSIS

#### Daclizumab HYP shows superiority to IFN- $\beta$ 1a for reducing relapses in multiple sclerosis

An active comparator study has shown that injections of daclizumab high-yield process (HYP), administered every 4 weeks, are more effective than weekly IFN- $\beta$ 1a injections at reducing relapse rates in patients with multiple sclerosis. However, the two drugs were comparable in terms of their effects on disability progression, and adverse events were more common in the daclizumab HYP group than in the IFN- $\beta$ 1a group, indicating that the choice of treatment is likely to be dictated by a variety of factors in addition to efficacy.

**Original article** Kappos, L. *et al.* Daclizumab HYP versus interferon beta-1a in relapsing multiple sclerosis. *N. Engl. J. Med.* **373**, 1418–1428 (2015)

### STROKE

#### Intravenous thrombolysis should not be ruled out for stroke recurring within 3 months

The current European licence for the thrombolytic agent alteplase prohibits the use of intravenous thrombolysis within 3 months of a previous stroke event, but this guidance has been challenged by new data from the SITS-EAST registry. In a retrospective study with 13,007 participants, intravenous thrombolysis produced similar outcomes in patients with first-ever stroke and individuals who had experienced a stroke  $\leq$ 3 months earlier, suggesting that a recent history of stroke should not be a contraindication to use of this intervention.

**Original article** Karlinski, M. *et al.* Intravenous thrombolysis for stroke recurring within 3 months from the previous event. *Stroke* doi:10.1161/STROKEAHA.115.010420

### NEURODEGENERATIVE DISEASE

#### Transgenic songbirds provide a model for vocal impairments in Huntington disease

Vocal impairments resulting from neurological disease are notoriously difficult to recapitulate in animal models, owing to differences in vocal circuitry between animals and humans. However, a team in New York has found that transgenic zebra finches expressing mutant huntingtin develop song abnormalities that resemble the vocal disorders associated with Huntington disease. The authors propose that these birds could provide a model to study the mechanisms underlying speech impairment in neurodegenerative disease.

**Original article** Liu, W.-C. *et al.* Human mutant huntingtin disrupts vocal learning in transgenic songbirds. *Nat. Neurosci.* doi:10.1038/nn.4133

### NEUROMUSCULAR DISEASE

#### Exon skipping rescues $\gamma$ -sarcoglycan deficiency

An internally truncated form of  $\gamma$ -sarcoglycan can substitute for the full-length protein, according to new research published in *The Journal of Clinical Investigation*. Gao *et al.* used an exon-skipping approach to bypass a frameshift mutation in the  $\gamma$ -sarcoglycan (SGCG) gene that causes limb-girdle muscular dystrophy. The resulting protein, termed Mini-Gamma, rescued  $\gamma$ -sarcoglycan deficiency in transgenic flies and mice. The researchers also demonstrated induction of exon skipping in human cells carrying SGCG mutations, implying that exon skipping could be a viable therapeutic approach in patients with limb-girdle muscular dystrophy.

**Original article** Gao, Q. Q. *et al.* Reengineering a transmembrane protein to treat muscular dystrophy using exon skipping. *J. Clin. Invest.* doi:10.1172/JCI82768