Rotigotine improves motor, sleep and non-motor symptoms of Parkinson's disease

Data from the RECOVER study published in *Movement Disorders* (Trenkwalder et al, 2010) show that treatment with rotigotine improved motor function, sleep and non-motor symptoms, compared to placebo, in people with Parkinson's disease.

The RECOVER study is the first large-scale, double-blind, randomized trial to investigate early morning motor function and sleep as co-primary outcome measures in Parkinson's disease. The study included 287 Parkinson's patients with unsatisfactory early-morning motor symptom control, of which 190 were randomized to rotigotine and 97 to placebo.

Data from the study showed that treatment with rotigotine significantly improved both early morning motor function and nocturnal sleep disturbance compared with placebo (P=0.0002 and P<0.0001 respectively).

'Sleep disturbance, along with other non-motor symptoms, is a common and important problem for people with Parkinson's which deserves more attention' said Professor K Ray Chaudhuri, Professor of Neurology at King's College London and a RECOVER study investigator.

'The RECOVER study not only demonstrated benefits with rotigotine in terms of sleep disturbance, impairment of early morning motor function and health-related quality of life', he emphasized, 'it also demonstrated the clinical benefits of continuous rotigotine delivery, as efficacy was maintained throughout the night and into the next morning, and significantly improved the start of the new day, one of the most troubling times for Parkinson's disease patients.'

Significant improvements were also seen with rotigotine in secondary and additional exploratory outcome measures related to sleep quality, pain, depression and activities of daily living. Rotigotine treatment was generally well tolerated and most reported adverse events were mild or moderate in intensity (placebo, 96%; rotigotine, 97%). The most frequently reported adverse events in the study were nausea, application site reactions and dizziness.

Trenkwalder C, Kies B, Rudzinska M et al; the RECOVER study group (2010) Rotigotine effects on early morning motor function and sleep in Parkinson's disease: A double-blind, randomized, placebo-controlled study (RECOVER). *Mov Disord* Nov 18 (Epub ahead of print)

Pilot of diffusion-weighted MRI may allow earlier treatment of prostate cancer

Diffusion-weighted magnetic resonance imaging (MRI) could be used instead of a biopsy to decide whether prostate cancer patients under active surveillance need treatment, according to results of a pilot study published in the *British Journal of Radiology* (Morgan et al, 2011).

Men diagnosed with early stage prostate cancer can delay therapy and opt instead for active surveillance – regular monitoring by biopsy and testing levels of prostate-specific antigen in the blood. However, scientists are looking for other ways to monitor cancer growth in these men and determine if treatment is needed.

The proportion of men opting for active surveillance increased from zero to 39% between 2002 and 2006. Active surveillance was made a standard treatment option in 2008.

Scientists at the Institute of Cancer Research and the Royal Marsden Hospital used diffusion-weighted MRI to scan 50 patients at their initial prostate cancer diagnosis and at a follow-up appointment an average of 2 years later.

Each scan was used to calculate the apparent diffusion coefficient, a measurement of water movement within tissue. These measurements are significantly lower in patients with high-risk tumours, but this is the first time they have been calculated for men under active surveillance.

By their follow-up appointment, 17 men had required treatment as their cancer had progressed, while 33 men remained under active surveillance. Diffusion-weighted measurements fell between the two scans in men who progressed to treatment, but remained similar for men still under active surveillance.

Morgan VA, Riches SF, Thomas K, Vanas N, Parker C, Giles S, Desouza NM (2011) Diffusion-weighted magnetic resonance imaging for monitoring prostate cancer progression in patients managed by active surveillance. *Br J Radiol* **84**(997): 31–7

Significant disability for older survivors of mechanical ventilation

Patients aged 65 years and older who survive an episode of mechanical ventilation during hospitalization are more likely to suffer long-term disabilities after leaving hospital than those who survive hospitalization without mechanical ventilation (14.9% *vs* 11.5% disability), according to researchers at the University of Pittsburgh.

Half of NHS hospitals cannot provide emergency surgery for sick children

Children who need common, general or urological operations face delays or long journeys to specialist centres for routine elective and emergency surgical care. This is the finding of a new survey conducted by the Royal College of Surgeons' Children's Surgical Forum, funded by the Department of Health.

Single drug anticoagulation moves a step closer

Publication of the phase III EINSTEIN-DVT study show that oral single-drug anticoagulation using rivaroxaban is looking more possible as an alternative to combination treatment for patients with deep vein thrombosis.