

# RGH Pharmacy E-Bulletin

Volume 25 (10): April 16, 2007

A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

Editor: Assoc. Prof. Chris Alderman, University of South Australia – Director of Pharmacy, RGH

© Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia 5041

## Ropinirole

Restless legs syndrome (RLS) is a neurological movement disorder characterized by an irresistible urge to move the legs accompanied by unpleasant sensations in the legs. The symptoms typically occur in the evening and at night and may significantly interfere with sleep. The syndrome is thought to be caused by a deficiency of dopamine in the CNS, and dopaminergic therapy is the treatment of choice.

Ropinirole (Repreve<sup>®</sup>) is a non-ergotamine dopamine receptor agonist indicated for the treatment of primary RLS. Ropinirole has dopaminergic activity at D2, D3 and D4 receptors. Randomized placebo-controlled studies have established that ropinirole is effective in alleviating the physical symptoms, reducing sleep disturbance and improving the quality of life of RSL sufferers. The efficacy of ropinirole is maintained over 36 weeks.

The recommended initial dose of ropinirole is 0.25 mg as a single daily dose one to three hours before bedtime. After two days, if the dose is well tolerated it should be increased to 0.5 mg daily and then slowly titrated over several weeks to a maximum of 4 mg daily depending on clinical response. First signs of response can be anticipated after one week of treatment, however, further titration is often required to achieve optimal effect. If treatment is interrupted for more than a few days, dose titration should be initiated again.

Most commonly reported adverse effects of ropinirole were typical of those associated with dopaminergic therapy – nausea, headache, abdominal pain, fatigue, dry mouth, nervousness and postural hypotension. Incidence of adverse effects is highest in the first two weeks of treatment, and declines over time. Rarely, ropinirole can cause sudden onset of sleep without any prior warning such as daytime drowsiness. Patients affected should be advised to see their doctor before driving or operating machinery.

As ropinirole has peripheral dopaminergic activity, patients with severe cardiovascular disease should be treated with caution. Other precautions include patients with psychotic disorders, hepatic impairment and renal impairment.

Ropinirole is metabolized by the hepatic enzyme CYP1A2, and therefore there is potential for interaction with drugs that induce or inhibit this enzyme, such as theophylline, ciprofloxacin and fluvoxamine. Centrally acting dopamine antagonists may reduce effectiveness of ropinirole and therefore concomitant treatment should be avoided. Treatment with high dose oestrogens has been found to increase plasma concentration of ropinirole, which may warrant dose adjustment.

Ropinirole is available in 0.25mg, 0.5mg and 2mg tablets. Currently, supply in Australia is not subsidized by the Pharmaceutical Benefits Scheme.

Acknowledgment – This E-Bulletin is based on work by Dasha Loutchkina, Utility Pharmacist, RGH

**FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: [chris.alderman@rgh.sa.gov.au](mailto:chris.alderman@rgh.sa.gov.au)**  
Information in this E-Bulletin is derived from critical analysis of available evidence – individual clinical circumstances should be considered when making treatment decisions. You are welcome to forward this E-bulletin by email to others you might feel would be interested, or to print the E-Bulletin for wider distribution. Reproduction of this material is permissible for purposes of individual study or research.