

# RGH Pharmacy E-Bulletin

Volume 37 (5): March 8, 2010

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

## Once monthly bisphosphonate therapy

Oral bisphosphonates are well established as a first-line option for the treatment of osteoporosis. Bisphosphonates inhibit bone resorption, increase bone mineral density (BMD) and decrease the risk of osteoporotic fractures. For alendronate and risedronate, weekly administration is as effective as once daily dosing. More recently, a presentation of risedronate has become available in a format that allows treatment to be administered once a month, and it is expected that this will further improve ease of administration and patient compliance.

In a recent randomised, double-blind study the efficacy and safety of 150 mg risedronate administered as a single oral dose once monthly was compared with the standard 5 mg daily regimen in a cohort of 1294 postmenopausal women. After twelve months the primary efficacy endpoint (measured as a mean percentage change in lumbar spine BMD) was compared between treatment groups and no significant difference between groups was detected. There was an increase in BMD from baseline in the hip in both treatment groups but no significant difference in the extent between the two groups. In terms of adverse effects, diarrhoea and influenza-like illness were more common in the monthly treatment group when compared with the daily administration group. Atrial fibrillation was reported in 0.5% of patients in the daily administration group and 0.6% in the monthly treatment group. There was no osteonecrosis of the jaw reported. The authors concluded that in this study, monthly risedronate was comparable in safety and efficacy to daily dosing in the treatment of postmenopausal osteoporosis. This study was limited to one year's treatment and was to be continued for another year. This study was also funded by the manufacturer of the risedronate product. Unfortunately, this study did not report outcomes in terms of specific anti-fracture efficacy measures.

Ibandronate is another bisphosphonate available overseas in a once-monthly administration format for the treatment of postmenopausal osteoporosis. In the MOBILE study, 1609 postmenopausal women were randomised to receive either 2.5 mg of ibandronate daily, 50 mg for two consecutive days each month, 100 mg once monthly or 150 mg once monthly. After two years, the regimen involving the administration of ibandronate 150 mg once monthly was found to be significantly superior to the 2.5mg daily oral dose approach. Lumbar spine and total hip BMD were greater and there were no differences in adverse effects. A further extension of the trial by one year showed there was sustained efficacy after three years.

In Australia the oral ibandronate 50 mg tablet is available as a restricted benefit through the Pharmaceutical Benefits Scheme for the management of bony metastases from breast cancer, but not for osteoporosis. Risedronate 150 mg once-a-month is available for men and women over the age of 70 with osteoporosis and a BMD T-score of -3 or less, or for those with established osteoporosis with fracture due to minimal trauma.

This E-Bulletin is based on work by Irene Heng Senior Clinical Pharmacist, RGH

**FOR FURTHER INFORMATION CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: [chris.alderman@health.sa.gov.au](mailto:chris.alderman@health.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.