

**Medicines Update**

# Risedronate (Risedronate Sandoz®)

## Key Messages: fully funded bisphosphonate, without Special Authority

- Risedronate is indicated for the **treatment of osteoporosis and postmenopausal osteoporosis** and for the **prevention of glucocorticoid-induced osteoporosis**. It is available without Special Authority.
- Oral risedronate, **35mg taken once weekly**, is likely to become the treatment of choice for patients with osteoporosis or at risk of osteoporotic fractures, due to its unrestricted subsidy access compared to alendronate or zoledronic acid and its superior efficacy and simpler dosing regimen compared to etidronate.

## What is the place of risedronate in practice?

This change will facilitate treatment of patients for whom **access to bone density measurement is either not available or difficult to access**. However, optimal use of treatments for osteoporosis requires both a diagnosis and an estimation of fracture risk, and discussion of that risk with the patient before embarking on treatment.

Measurement of Bone Mineral Density (BMD) remains a pivotal component of the currently available fracture risk algorithms ([www.shef.ac.uk/FRAX](http://www.shef.ac.uk/FRAX) or <http://www.garvan.org.au/bone-fracture-risk/>) and if available and/or accessible it should be undertaken to facilitate optimal management of the patient's fracture risk.

Risedronate should be prescribed for an initial period of 3-5 years and the patient re-assessed one year after discontinuation to determine whether continued treatment is appropriate. Supplemental calcium and Vitamin D may be required if dietary intake is insufficient.

## How effective is risedronate?

Risedronate is significantly more effective than placebo in the treatment of postmenopausal osteoporosis. Overall, risedronate reduced the incidence of vertebral fractures by approximately 41-49% and non-vertebral fractures by 36% over three years, with a significant reduction in risk being apparent in patients with a prior vertebral fracture after one year of treatment. All patients in these studies received supplemental calcium in doses of up to 1000mg.

Risedronate is generally well tolerated and as with alendronate upper GI symptoms are the main adverse effects influencing long-term adherence. Risedronate must be taken in the same way as alendronate to reduce risk of oesophageal complications. Contraindications and precautions are similar to that of alendronate, refer [www.nzf.org](http://www.nzf.org)

## How effective is risedronate compared to other bisphosphonates?

The clinical effectiveness of bisphosphonates depends on its bone-binding affinity and the level of inhibition of a key enzyme which results in decreased bone resorption. Bisphosphonates with a higher affinity will bind more strongly to the bone but be less widely distributed through bone. In contrast, bisphosphonates with a lower affinity will be more widely distributed, but will be lost at a greater rate if treatment is stopped.

- Risedronate and alendronate appear to be equally effective at reducing fracture risk and have similar risk profiles.
- There are few head to head trials comparing risedronate with etidronate. The small amount of data comparing the two suggests that risedronate is more effective than etidronate at reducing osteoporotic vertebral fracture risk. Etidronate is a weak bisphosphonate for which there is no evidence of non-vertebral fracture risk reduction.

<b>Bone-binding affinity (highest to lowest)</b>	<b>Zoledronic acid &gt; Alendronate &gt; Risedronate</b>
<b>Enzyme inhibition potency (highest to lowest)</b>	<b>Zoledronic acid &gt; Risedronate &gt; Alendronate</b>

## References

1. **Auckland Bone Density, Winter 2013 Newsletter**  
<http://www.bonedensity.co.nz/NewsLetters/newsletter%20Winter%202013.pdf>
2. **Medsafe Risedronate Data Sheets** <http://www.medsafe.govt.nz/profs/datasheet/r/risedronatesandoztab.pdf>
3. **Risedronate now fully subsidised: What is its place in practice?** BPJ Issue 56, November 2013  
<http://www.bpac.org.nz/BPJ/2013/November/risedronate.aspx>

For further prescribing information go to The New Zealand National Formulary [www.nzf.org.nz](http://www.nzf.org.nz)