

BOURNEMOUTH, DORSET AND POOLE PRESCRIBING FORUM

A CONSENSUS STATEMENT ON THE CHOICE OF BISPHOSPHONATE TO BE USED WHERE NICE TA 160 AND 161 APPLY AND TIPS ON INCREASING CONCORDANCE WITH BISPHOSPHONATES

NICE technology appraisal (TA) No 160: Alendronate, etidronate, risedronate, raloxifene, and strontium ranelate for the primary prevention of osteoporotic fragility fractures in postmenopausal women.

First-line agent is alendronate.

Comparative evidence for a benefit of risedronate over alendronate is lacking but if individual patients are contra-indicated or non-compliant with alendronate then risedronate may be considered if it is possible that a patient will comply with this drug compared to alendronate.

If there is a true justification for the monthly formulation of ibandronate to improve compliance in an individual patient it may be considered as an option. Strontium may be considered as an alternative agent if patients are unable to comply with the special instructions for the administration of alendronate and either risedronate or etidronate, or have a contraindication to or are intolerant of alendronate and either risedronate or etidronate **and** who also have a combination of T-score, age and number of independent clinical risk factors for fracture (as indicated in 1.3 and 1.5 of NICE guidance). If patients have very poor dental health strontium may be the preferred agent. Zoledronic acid is not licensed for the primary prevention of osteoporosis. Therefore if a patient is being considered for an IV bisphosphonate for the primary prevention of osteoporosis an application should be made for treatment through the relevant PCT's individual cases process.

NICE technology appraisal (TA) No 160: Alendronate, etidronate, risedronate, raloxifene, strontium ranelate and teriparatide for the secondary prevention of osteoporotic fragility fractures in postmenopausal women.

As in primary prevention, the first-line agent should be Alendronate.

Risedronate, strontium or raloxifene are second-line choices. Risedronate should be considered unless it is contra-indicated or if there are concordance issues with oral bisphosphonates. Zoledronic acid may be a third-line choice where a bisphosphonate is an appropriate agent but concordance issues with oral bisphosphonates are significant and preclude their use.

Tips to maximize concordance with bisphosphonates:

Data suggests that adherence to long-term bisphosphonate therapy, rather than the specific bisphosphonate used, is the most important factor in determining the effectiveness of treatment for limiting fracture risk. ¹

Key considerations to increase adherence include:

- Specifying the day on the prescription for which the bisphosphonate should be taken,
- Using medicines use reviews in community pharmacies to discuss concordance with patients receiving bisphosphonates and reinforce messages of method of administration and importance to continue,
- Using the NICE clinical guideline on medicines adherence to enhance concordance,
- Using medication review as an opportunity to discuss concordance,
- Training with care agencies on administration and concordance issues with bisphosphonates,
- Use of Osteoporosis Dorset to educate professionals and patients, including increasing the profile of osteoporosis and its consequences for patients.

Comparative evidence for a benefit for risedronate over alendronate is lacking. Evidence suggests that there are no significant differences in upper GI adverse effects between alendronate and risedronate. The occurrence of jaw necrosis, atrial fibrillation and atypical stress fractures are likely to be class effects. All acute Trusts should ensure that information such as discharge medications or hip fracture guidance only specifies alendronate where a bisphosphonate is indicated.

The role of calcium and vitamin D

The NICE TA's state that unless clinicians are confident that women who receive treatment meet criteria for an adequate intake of calcium and are vitamin D replete, supplementation should be considered. Bisphosphonates have only been shown to be beneficial with calcium and vitamin D and therefore, a decision to discontinue the bisphosphonates may be made where an adequate calcium and vitamin D intake is not maintained.

Patient groups not covered under the NICE technology appraisals 160 and 161

It is considered that men should be treated according to the principles outlined in the NICE TAs. Men should not be treated unless they have been investigated for any underlying causes. Patient receiving steroids should be treated according to the guidance from the Royal College of Physicians.

Comparative costs of annual prescribing of oral bisphosphonates:

Alendronic acid 70mg weekly	£ 20.28
Risedronate sodium 35mg weekly	£253.63 (patent expiry Dec 2010)
Ibandronic acid 150mg monthly	£239.20 (patent expiry June 2011)
Strontium ranelate 2g daily	£332.80 (patent expiry Aug 2010)

Source: Drug Tariff April 2009

Ref

1. Siris E et al. Adherence to Bisphosphonate Therapy and Fracture Rates in Osteoporotic Women: Relationship to Vertebral and Nonvertebral Fractures From 2 US Claims Databases. *Mayo Clin Proc.* August 2006 81(8):1013-1022; doi:10.4065/81.8.1013

Approved by the Bournemouth, Dorset and Poole Prescribing Forum: April 2009.

For review: April 2011 or when new evidence is available.