

BONE HEALTH

Action Plan

For use with patients being prescribed
an osteoporosis medicine



To order more visit
www.nps.org.au/hporders

INFORMATION FOR HEALTH PROFESSIONALS

About this tool

The tool is designed to be used with patients prescribed osteoporosis medicines – according to Australian clinical guidelines.

It can be used to facilitate discussions with patients about the benefits of recommended treatments and associated medicines safety issues, and to promote adherence.

For patients at high risk of fracture, osteoporosis medicines are the preferred option

In patients with and without prior minimal trauma fracture, osteoporosis medicines reduce vertebral fractures by 30%–70% and non-vertebral fractures by 30%–50%.¹

Osteoporosis medicines are recommended for patients:^{2–4}

- ▶ with minimal trauma fracture (vertebral or non-vertebral)
- ▶ with a T-score < -2.5 who have other clinical risk factors present
- ▶ on oral corticosteroid therapy of > 5.0 mg/day or equivalent, or high doses of inhaled corticosteroids, for at least 3 months, with a T-score < -1.0
- ▶ aged > 65 years with a T-score of -2.0 to -2.5 and other risk factors present.

PBS subsidy may apply. Go to www.pbs.gov.au for full list of restrictions.

Osteoporosis medicines are generally well tolerated.⁴ Some serious adverse effects have been associated with long-term use but these are rare occurrences.^{1,4,5}

Poor adherence reduces clinical benefit

- ▶ Poor adherence to osteoporosis medicines is associated with significantly higher risk of fracture and hospitalisation, and higher medical costs.⁶
- ▶ At least 40% of those taking osteoporosis medicines are insufficiently adherent to obtain full clinical benefit.⁷
- ▶ Patients who take less than 50% of their prescribed medicines have the same fracture risk as untreated patients.⁸
- ▶ After starting treatment, osteoporosis medicines take 6–12 months to reduce fracture risk.⁹

Reasons for poor adherence include gaps in patient knowledge about the risks associated with osteoporosis and patient concerns about the effectiveness and safety of osteoporosis medicines.⁹

Other lifestyle considerations

- ▶ Lifestyle changes remain important aspects of osteoporosis prevention.¹⁰
- ▶ Ensure adequate intake of calcium and levels of vitamin D.^{4,5}

Recommended daily calcium intake^{4,5}

1,000 mg for women ≤ 50 years and men ≤ 70 years
1,300 mg for women > 50 years and men > 70 years

Recommended levels of serum 25-hydroxyvitamin D concentration (25[OH]D)⁴

≥ 50 nmol/L at end of winter or early spring in general population
≥ 75 nmol/L in people diagnosed with osteoporosis

For more details on selecting osteoporosis medicines, effectiveness, potential harms, medicines adherence and monitoring, go to www.nps.org.au/osteoporosis.

* Only consider oral calcium supplements if dietary intake is insufficient. Calcium supplements have been associated with increased risk of MI and stroke. Balance the benefits of calcium supplements with the risk of potential cardiovascular adverse effects.



To re-order visit www.nps.org.au/hporders

For a downloadable PDF visit www.nps.org.au/bone-health-action-plan

For more information and resources visit www.nps.org.au/osteoporosis

REFERENCES

1. Scottish Intercollegiate Guidelines Network. Management of osteoporosis and the prevention of fragility fractures. A national clinical guideline. Edinburgh, 2015.
2. Osteoporosis Australia. What you need to know about osteoporosis. Australia: Osteoporosis Australia, 2014. http://www.osteoporosis.org.au/sites/default/files/files/oa_medical_brochure_2nd_ed.pdf (accessed 10 June 2015).
3. Osteoporosis Australia. Bone density testing in general practice. Sydney: Osteoporosis Australia, 2015. <http://www.osteoporosis.org.au/sites/default/files/files/Bone%20Density%20Testing%20in%20General%20Practice.pdf> (accessed 26 June 2015).
4. Therapeutic Guidelines. Osteoporosis. Melbourne: Therapeutic Guidelines Limited, 2015. <http://online.tg.org.au/ip/desktop/index.htm> (accessed 14 May 2015).
5. The Royal Australian College of General Practitioners. Clinical guideline for the prevention and treatment of osteoporosis in postmenopausal women and older men. Melbourne: RACGP, 2010. http://www.racgp.org.au/download/documents/Guidelines/Musculoskeletal/racgp_oste_o_guideline.pdf (accessed 30 April 2015).
6. Halpern R, et al. J Manag Care Pharm 2011;17:25-39.
7. Australian Institute of Health and Welfare. Use of antiresorptive agents for osteoporosis management. Canberra: AIHW, 2011.
8. Siris ES, et al. Mayo Clin Proc 2006;81:1013-22.
9. Rigby D. The Australian Journal of Pharmacy 2013;94:44-6.
10. The Royal Australian College of General Practitioners. Guidelines for preventive activities in general practice. Melbourne: RACGP, 2012. <http://www.racgp.org.au/your-practice/guidelines/redbook/osteoporosis/> (accessed 30 April 2015).

MANAGING YOUR BONE HEALTH: INFORMATION FOR PATIENTS

Patient name: _____ Date: __ / __ / ____

Tick where appropriate

You have been prescribed an osteoporosis medicine because:

- you have had a fracture caused by a minor fall or injury
- you have been diagnosed with osteoporosis but have not had a fracture
- you are taking medicines that may cause osteoporosis (eg, corticosteroids)

You have been prescribed:

- Bisphosphonate
(alendronate, risedronate,
zoledronic acid)
- Denosumab
- Raloxifene
- Strontium ranelate
- Teriparatide

Dosage and advice

- ▶ It is important to take your medicine as advised by your health professional.

You need adequate levels of calcium and vitamin D for your medicines to be effective.

Calcium intake:

- Maintain current calcium intake
- Increase dietary intake of calcium
- Calcium supplements

Advice

- ▶ It is better to get your recommended daily calcium intake from diet than from supplements

Vitamin D levels:

- Get your recommended daily
sun exposure

For more information go to www.cancer.org.au/preventing-cancer/sun-protection/vitamin-d

- Vitamin D supplements

Review date: ____ / ____ / ____

Date of follow up test: ____ / ____ / ____

Signature: _____

Practice stamp:

MANAGING YOUR BONE HEALTH: INFORMATION FOR PATIENTS

Osteoporosis medicines reduce your chances of fractures

Osteoporosis medicines work by:

- ▶ slowing the breakdown of bone, or
- ▶ increasing the production of new bone.

As a result, they increase your bone strength and reduce your chances of fracture. People with low bone strength may have a fracture after even a minor fall or injury.

Take your osteoporosis medicines as advised

Your bones may have weakened over many years so it will take time to rebuild new bone.

It can take between 6 and 12 months for your osteoporosis medicines to begin to reduce your risk of fracture.

Osteoporosis medicines can reduce spinal fractures by 30%–70% and hip fractures by 30%–50%.

Not taking your osteoporosis medicines properly will increase your risk of fractures

If you stop taking your osteoporosis medicines early or don't take them as your doctor has prescribed:

- ▶ your chance of having a fracture and being hospitalised is higher than someone who takes their osteoporosis medicines correctly.
- ▶ your chance of having a fracture may even be the same as someone with osteoporosis who isn't taking any osteoporosis medicines.

Your treatment will be reviewed regularly

As part of your osteoporosis medicine review your doctor may send you for tests such as a dual energy X-ray absorptiometry (DXA/DEXA) scan to measure your bone density.

Serious side effects are uncommon but...

Talk to your health professional if:

- ▶ you are unable to take your medicines as prescribed (eg, if you are unable to stay upright for at least 30 minutes after taking a bisphosphonate).
- ▶ you think you are experiencing a side effect while taking your osteoporosis medicines.
- ▶ you develop any of the following:
 - pain in the thigh, hip or groin area
 - severe jaw pain, numbness or swelling of the jaw
 - nausea or vomiting, difficulty swallowing, loss of appetite, blood in vomit or stools, or chest pain, as these symptoms may indicate gastrointestinal problems.

You can improve your bone health by....

- ▶ having a healthy lifestyle – this is also good for your overall health and wellbeing.
- ▶ making healthy lifestyle changes, such as:
 - getting enough vitamin D through safe sun exposure.
 - getting your recommended daily dietary calcium intake.
 - doing regular high intensity weight-bearing and resistance exercises. Talk to your health professional about what exercise is suitable for you.
 - limiting your alcohol intake to 2 standard drinks a day or fewer.
 - stopping smoking. Talk to your health professional about ways to quit.
 - maintaining a healthy weight. Talk to your health professional about ways to do this.
 - talking to your health professional about ways to prevent falls.