

Drug treatments for osteoporosis: Alendronate (Alendronic acid, Fosamax or Binosto)

This leaflet explains about alendronate treatment for osteoporosis, including how it works, how to take it and any risks and benefits.

What is alendronate?

Alendronate is a medication within a family of drugs called 'bisphosphonates'. Alendronate is most commonly taken as a tablet once a week (on the same day each week) but is also available in an oral solution (liquid drink) or effervescent tablet (Binosto).

How does this medication work?

This medication works to counteract bone density loss associated with osteoporosis or osteopenia and reduces the likelihood of further lower impact fractures. Bone is constantly being broken down and rebuilt by specialist bone cells. This is called bone remodelling. When this becomes out of balance and more bone is broken down than is rebuilt, osteoporosis occurs. Bisphosphonates, such as alendronate, inhibit the cells (osteoclasts) that wear down bone and consequently improve bone strength.

Why should I take this medication?

Although the thought of taking a new medication can be daunting, we would only recommend this medication if we deemed it in your best interest. Osteoporosis is a lifelong disease and the decisions we make now will likely have an impact on the effects of the condition in later life. If untreated, osteoporosis / osteopenia will likely worsen and can lead to significant fractures (particularly of the hip and spine) going forward. These fractures can cause a great deal of discomfort and lead to ongoing mobility issues. If taken properly, this medication significantly lowers a person's risk of fractures and enables patients with reduced bone mineral density to continue to live active lifestyles.

How long should I take this medication for?

The current advice from the UK drug regulatory organisation (MHRA) is for a treatment review after about five years. At this review, your clinician will make sure that the drugs are still needed and that they are not causing side effects. You may be advised to continue to take the drug, have a 'pause' in your treatment or be advised to stop taking it altogether. Your clinician will be able to advise you on what is best for you, based on your individual circumstances. You must **not** take this medication for longer than a 10-year continuous period. If further treatment is required at that point, an alternative will be prescribed.

How can I get the most out of my drug treatment?

1. Be informed

Find out about your drug treatment so that you can be involved in any decisions being made and will know what to expect. Talk to the Fracture Liaison Service and/or contact the helpline at the Royal Osteoporosis Society if you have any questions or concerns.

2. Make sure the drug is properly absorbed

Regardless of whether you are taking the tablet or oral solution, you will be instructed to take alendronate **at least 30 minutes before your first food or drink** (other than plain tap water) of the day. **It is also important that you avoid any other medication during this time.**

This instruction is important because alendronate will only be absorbed if taken on an empty stomach. Please also ensure you remain upright (sitting or standing) for 30 minutes after taking this medication. If you are taking a calcium supplement, it is important to leave at least 3-4 hours after taking your alendronate because calcium will prevent its absorption.

3. Make sure alendronate is the treatment for you

If you have any of the following, please speak to a clinician before taking Alendronate:

- If you cannot swallow tablets whole, due to a physical problem or abnormality in your gullet (the oral solution or injectable treatments may be more appropriate for you).
- If you suffer with Barrett's oesophagus.
- If you have severe kidney problems.
- If you have a recent history of peptic ulcers.
- If you are awaiting significant dental work.

4. Continue to take your tablets regularly for the correct length of time

Alendronate is generally prescribed long-term so you need to be happy with the treatment. Although it is important that you take the medication as instructed, missing the odd week will probably not have an impact on your bone health in the long run, but you should avoid missing doses if you can. If you regularly forget or struggle to take your medication, it would be sensible to speak to your GP or the Fracture Liaison Service about other treatment options that you may find easier to take.

5. Lead a healthy lifestyle to keep your bones strong

Factors that can help to maintain healthy bones are a well-balanced diet with adequate calcium-rich foods, safe exposure to sunlight to obtain vitamin D, regular weight-bearing exercise, avoiding smoking and keeping alcohol/caffeine consumption within the recommended limits. If you have been diagnosed with osteoporosis and are taking a drug treatment for this, you may need to boost your calcium intake and Vitamin D levels. Your clinician can prescribe supplements of calcium and/or vitamin D if you need them.

6. Understand the risk of side effects and what can be done to reduce them

As with any drug, there are potential side effects with alendronate. Please remember that:

- Most people will not experience side effects, or if they do, they last only a short period after you start treatment.

- The risk of the vast majority of the side effects can be reduced significantly by taking your medication as described on the packaging and looking after your whole body health. This medication has been in use for many years and has proven to be a safe and effective treatment for Osteoporosis.
- Due to the rare risk of side effects following significant dental work while taking this medication, please ensure you attend six monthly check up appointments with your dentist.
- The full list of possible side effects can be found in the leaflet that accompanies your tablets.

The most important thing to remember with these medications is that there are almost always alternatives. If you do not tolerate this medication for any reason, please contact either the Fracture Liaison Service or your GP surgery to discuss these alternatives.

Further information

The Royal Osteoporosis Society website has lots of useful information and advice, visit <https://theros.org.uk/information-and-support/fact-sheets-and-leaflets/>

For osteoporosis information and support contact the specialist nurse helpline: nurses@theros.org.uk or 0808 800 0035. This information is provided free of charge.

Contacting us

Fracture Fragility Service / Bone Health Team:

Tel: 0118 322 5111 (Extension 3542)

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

Fracture Fragility Service, May 2023

Next review due: May 2025