



Drug treatments for osteoporosis: Zoledronate

This leaflet explains Zoledronate treatment for osteoporosis, including how it works, how it is given and any risks and benefits.

What is Zoledronate?

Zoledronate, also called Aclasta, is a medication within a family of drugs called 'bisphosphonates'. Zoledronate is given as an intravenous infusion (drip) once a year, usually in a hospital day-ward as an outpatient. The drug is administered slowly over a 20-30 minute period, via a needle inserted into a vein in your arm.

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, called bone remodelling. When this becomes out of balance and significantly more bone is broken down than is rebuilt, Osteoporosis occurs. Bisphosphonates, such as Zoledronate, inhibit the cells (osteoclasts) that break down bone and consequently improves 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 degenerative condition and the decisions made 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). These fractures can cause a great deal of discomfort and lead to ongoing mobility issues. 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?

Most patients will be given this medication once a year for three years and then have a two year pause before restarting. (For patients aged over 70, or those at high risk it may be for six consecutive years). This medication can often be given long term.

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

1. Be informed

If you wish to find out more about your drug talk to the Fracture Liaison Service, your GP team and/or contact the helpline at the Royal Osteoporosis Society, or website www.theros.org.uk if you have any questions.

2. Make sure you have enough Calcium and Vitamin D

It is important that you have enough Calcium and Vitamin D while being prescribed Zoledronate. Many people take these in supplement form alongside this medication. It is likely that you will be asked to have a blood test prior to each infusion to check your kidneys are functioning correctly and your Calcium and Vitamin D levels are sufficient for this medication to be safe and effective.

Make sure you drink enough fluids – at least one or two glasses – before and after the infusion to prevent dehydration.

3. Make sure Zoledronate is the treatment for you

If you have any of the following, please speak to a clinician before commencing Zoledronate:

- Hypocalcaemia (this means the levels of calcium in your blood are low).
- Severe kidney problems.
- If you are awaiting significant dental work. This would be unlikely to stop you having the treatment but will ensure we can arrange it for the best time around your treatment.
- A history of Paroxysmal Atrial Fibrillation.

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

If you are prescribed this medication, it is important that you remember to attend your appointments each year. This will allow this medication to build up and have the best effect within your body.

This medication should be reviewed after each cycle. At this review, a clinician will assess whether this medication is still required and will also check that the benefits of continuing this medication outweigh any potential risks. During this assessment, you will either be advised to continue with this medication after a two year 'drug holiday', switch to an alternative form of treatment or be asked to stop the medication altogether. This recommendation will be made based on your individual case.

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 Zoledronate. Please remember that:

- Most people will not experience side effects, if they do, they last usually for a few days after the infusion.
- The risk of the vast majority of the side effects can be reduced significantly by looking after your whole body health and staying hydrated. 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 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, and further information about this medication please visit <https://theros.org.uk/information-and-support/fact-sheets-and-leaflets/>

For osteoporosis information and support, contact the specialist nurse helpline: 0808 800 0035 or email nurses@theros.org.uk. 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.

RBFT Fracture Fragility Service

Reviewed: July 2024

Next review due: July 2026