

# Drug treatments for osteoporosis: Denosumab (Prolia)

**This leaflet explains Denosumab treatment for osteoporosis, including how it works, how to take it and risks and benefits.**

## What is Denosumab?

Denosumab is a drug treatment which is used to reduce the risk of broken bones in people with osteoporosis. It is given as a sub-cutaneous injection (just under the skin) every six months.

## 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. Denosumab inhibits the cells (osteoclasts) that break down bone and consequently prevents bone loss.

## 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 to be 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). These fractures can cause a great deal of discomfort and lead to ongoing mobility issues. If given 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 that this medication is considered lifelong. If your GP is considering stopping then it is recommended they refer first to Rheumatology for further guidance. Your clinician will then be able to advise you on what is best for you based on your individual circumstances.

**Note: It is very important to have each subsequent dose as close to six months from the previous injection as possible. This ensures optimum bone density protection.**

## 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.

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Excellent

## **2. Make sure you have enough Calcium and Vitamin D**

It is important that you have enough Calcium and Vitamin D while being prescribed Denosumab. 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 injection to check your kidneys are functioning correctly and your Calcium & Vitamin D levels are sufficient for this medication to be safe and effective.

## **3. Make sure Denosumab is the treatment for you**

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

- A low blood calcium level (also known as hypocalcaemia).
- A rare hereditary intolerance to Fructose.
- Severe kidney problems.
- If you are awaiting significant dental work.

## **4. Continue to take your treatment regularly and ensure you discuss an alternative treatment plan before stopping Denosumab.**

The effects of Denosumab wear off quickly 6 months after your most recent injection. 'Rebound fractures', particularly in the spine, have been noted in some patients who stop taking Denosumab and do not receive an alternative.

Denosumab is likely to be recommended for at least a decade or even longer, but there is no formal guidance as to how long the course should be. Usually, if Denosumab is stopped, you will be prescribed another drug (such as a bisphosphonate) for at least a year to help keep your bones strong. If your risk of fracture is considered low, this may not be necessary.

Denosumab should not be confused with the bisphosphonates, Alendronic Acid, Risedronate and Zoledronic Acid which stay in the bones, often for a number of years and may continue to help keep bones strong after you stop taking them.

## **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 vitamin D and/or calcium 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 Denosumab. Please remember that:

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

- The risk of the vast majority of the side effects can be reduced significantly by 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 regular 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 your GP surgery to discuss any problems.**

### **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](mailto: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](http://www.royalberkshire.nhs.uk)

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

RBFT Fracture Fragility Service

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