MEDICINE INFORMATION

# Denosumab (Xgeva)

Patient information about cancer-related denosumab injections, including dental care, calcium monitoring and symptoms to report.

## At a glance

Denosumab helps protect bones affected by cancer. It is given as an injection under the skin. It can lower the calcium level in your blood and occasionally cause problems with jaw healing. Arrange a dental check and ask about calcium, vitamin D and blood tests before the first dose.

**How it is given.** You receive denosumab as an injection under the skin.

## How it works

Bone is continually broken down and rebuilt. Denosumab blocks a signal called RANK ligand that activates the cells that break down bone. Slowing this process can reduce problems such as broken bones or the need for radiotherapy or surgery to the bone.

## Is this treatment suitable for me?

This guide covers cancer-related denosumab, such as Xgeva. It may be given when cancer has spread to bone or in multiple myeloma. There are also specific uses in giant cell tumour of bone and, in some countries, for high blood calcium due to cancer that has not improved with a bisphosphonate. Your team can explain why it was prescribed and what it is intended to prevent or treat.

Prolia also contains denosumab and is used for some people with osteoporosis or bone loss from treatment. Its schedule and purpose differ. Tell the team if you already receive a denosumab product.

## Before treatment starts

Tell the team about low calcium, kidney disease or dialysis, and any problems with teeth, gums, dentures or healing after dental surgery. Your team will check your calcium and may arrange a dental examination. They may wait for a mouth wound to heal or correct low calcium before starting.

Ask which calcium and vitamin D supplements to take. The advice may be different if your blood calcium is high. Check any supplements you already use so you know what to continue.

## How treatment is given

A healthcare professional gives the injection into the skin of the upper arm, thigh or abdomen. Many cancer-related plans use injections about every four weeks. Some conditions have additional visits early in treatment. Ask for your own calendar and call the unit if you miss an appointment.

## Monitoring your treatment

Your team checks calcium before starting and may repeat it shortly after the first dose. Further tests depend on your results, kidney function and symptoms. People with severe kidney disease or on dialysis may need closer checks because their calcium can fall more easily.

Keep regular dental checks. Show the dentist your treatment details and ask them to speak with your oncology team before an extraction or other procedure involving the jaw.

## Side effects

### Common effects

Muscle or bone pain, diarrhoea and changes in calcium or phosphate can occur. Tell the team if symptoms affect drinking, walking or sleep. New or worsening breathlessness can have several causes and needs assessment.

### Important effects

- **Low calcium.** Tingling around the mouth or in the fingers, cramps, twitching or muscle spasms may be warning signs. Call the team even if you are taking supplements.
- **Jaw problems.** Persistent jaw pain, swelling, loose teeth, discharge or a mouth sore that does not heal should be checked. These can be signs of bone damage called osteonecrosis of the jaw.
- **Thigh, hip or groin pain.** New, unexplained pain can sometimes precede an unusual thigh bone fracture. Tell the team promptly.

## When to seek urgent help

Call your treating team straight away for new tingling around the mouth, persistent muscle cramps, twitching or worsening breathlessness. Seek emergency care for a seizure, severe confusion, collapse, severe breathing difficulty or rapidly developing swelling of the face or throat. Tell staff you have received denosumab.

## Practical advice for this treatment

### Organise dental care

Tell your dentist you are receiving denosumab and tell the oncology team if a tooth extraction or implant is planned. If the dentist recommends a procedure, ask both teams to agree on timing. Report pain, swelling, a loose tooth or a mouth wound that takes longer than expected to heal.

### Know which supplements are appropriate

The team checks calcium before and during treatment. It may prescribe calcium and vitamin D, depending on the reason for treatment and your blood results. Tell it about kidney disease and other supplements. Ask what to do about tingling around the mouth, muscle cramps or twitching.

### Discuss the plan before stopping

If treatment is due to stop or a dose is delayed, ask if you need another bone medicine or follow-up calcium checks. In people treated for giant cell tumour of bone and in people whose bones are still growing, calcium can rise after stopping. Report new vomiting, marked thirst or confusion.

## Other medicines and vaccinations

Bring your medicine list, including any injections for bone health. Your team should check for other denosumab or bone medicines before making a change. Ask which vaccine advice applies to your other treatments.

## Everyday life

Brush gently and regularly, and keep dentures clean and well fitting. Tell the dentist that you are receiving denosumab. Ask the team what movement and lifting are safe if cancer has weakened a bone. Keep taking the supplements your team prescribed unless they advise a change.

## Fertility, pregnancy and breastfeeding

Tell your team if you are pregnant, planning pregnancy or breastfeeding. The Xgeva product information advises effective contraception for people who could become pregnant during treatment and for at least five months after the last dose. Discuss breastfeeding and fertility with your team before treatment.

## After treatment

Discuss any plan to stop or delay injections with your team. They may monitor for high calcium after stopping, especially if you were treated for giant cell tumour of bone. Ask about your risk of spine fractures and whether you need further bone treatment or tests. Keep telling your dentist about previous denosumab use.

## Frequently asked questions

### Is Xgeva the same as Prolia?

Both contain denosumab. Ask which product and schedule you have because their uses and instructions differ.

### Is this treatment chemotherapy?

It is a bone-targeted antibody. Your cancer treatment may continue alongside it.

### Why do I need a dental check first?

Treating dental problems before starting can help reduce jaw complications. Ask whether any dental treatment should be completed first.

### Can I still have a filling or cleaning?

Tell your dentist about denosumab. They can advise on routine care and coordinate procedures that involve bone or an extraction.

### What if a tooth becomes loose?

Call your dentist and cancer team promptly, especially if there is pain, swelling or discharge.

### Can I take extra calcium for tingling?

Call the team promptly so they can check your calcium and advise you. Follow the supplement plan they give you.

### Do I need tests if I have no symptoms?

Yes. Calcium can fall before you notice it. Keep the checks your team schedules.

### Can I have denosumab with kidney disease?

Tell your team if you have kidney disease or have dialysis. Severe kidney problems can make a drop in calcium more likely. Your team can plan checks and advise which supplements to take. Call promptly for new tingling around the mouth or muscle cramps.

### What if I miss an injection?

Call the unit to reschedule and confirm how your next visit will be timed.

### Should I expect my bone pain to improve immediately?

Ask what improvement to expect and when. Your pain may also need other treatment.

### Can I take denosumab and zoledronic acid together?

Tell the team if either is on your medicine list. They will decide whether to use one, change treatments or make another plan.

### Is new thigh pain worth reporting?

Yes, especially if it is unexplained or persistent. The team can decide if you need an examination or scan.

### What should I tell a new dentist?

Give the name denosumab, the reason for treatment and the date of the last injection.

### Do I need follow-up if injections stop?

Ask for a plan. Your team may need to check calcium or consider other bone protection after treatment.

## Sources and further reading

Read this guide alongside your hospital's plan. Ask your pharmacist to confirm the exact product dispensed in India and follow the instructions for that product.

### Summary of Product Characteristics (SmPC) and prescribing information

- Denosumab (Xgeva) - EU SmPC
- Xgeva FDA prescribing information

### Additional sources

- Macmillan Cancer Support, denosumab
- Cancer Research UK, denosumab

Editorially approved by Dr (Prof) Vijay Agarwal

Professor and Lead Consultant - Medical Oncology

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