

# Guide for patients self-administering denosumab subcutaneous (under the skin) injections

Information for patients



This booklet provides instructions on the self-administration of denosumab and answers common questions about it.

Self-administration allows you to have the same effective medication while helping you to take greater control of your treatment and enable greater independence.

If at any point you would like to have your treatment delivered by a health professional, please speak to your doctor or nurse.

### **What is denosumab?**

Denosumab is a targeted therapy drug used to treat cancer that has spread to the bone (secondary bone cancer). It is also given to people with certain cancers to help strengthen bones. Denosumab can help strengthen bones, reduce bone pain, and lower the risk of problems such as breaks (fractures).

### **How is denosumab given?**

Denosumab is given as a subcutaneous injection. Subcutaneous means giving the injection into the fatty tissue layer just under the skin. When you perform a subcutaneous injection, you use a short needle to inject into the tissue layer between the skin and the muscle on the thigh, stomach or upper arm.

Subcutaneous injections must not be given if the skin is burned, hardened, inflamed, swollen, bruised or damaged by a previous injection.

### **What happens if I decide to self-inject at home?**

When you attend the chemotherapy day unit you will be shown:

- How to prepare the things you need to inject yourself and give the injection.
- Practice getting the injection ready and giving the injection with a nurse supervising.

When you have managed all of the above and feel confident to do so, you will be able to administer the injections at home. Your supervising nurse will be able to answer any questions you have.

### **What equipment will I need?**

You will be given the following equipment to take home:

- a disposal bin to dispose of the needles (sharps)
- a red needle for drawing the denosumab out of the vial
- a syringe
- an orange needle to administer the denosumab
- latex gloves, these should be used if someone else is administering the injection

You will be given all your supplies at the beginning of each treatment dose or when you attend for a blood test

appointment. If you run out of any of the supplies, you should contact the chemotherapy day unit and inform one of the nurses.

## **Preparing to administer the denosumab injection**

- Take the denosumab out of the fridge and allow the vial to reach room temperature.
- Wash your hands with soap and dry them. If you are administering the injection for someone else, put on the gloves provided by the hospital.
- Ensure the injection site is clean.
- Open the box containing the syringe, check that the packaging is intact and attach a red needle to the syringe.
- If the denosumab in the bottle looks cloudy or discoloured, do not use it. Instead, contact the day unit who will arrange for another denosumab to be sent to your home.
- You can then draw up the contents of the whole vial (1.7mls) using the red needle into the syringe ready for injection.

The injection should be given in the thigh, stomach or upper arm, it can be useful to have a cotton wool ball handy to press to the injection site after the denosumab has been administered.

When you are ready to administer the denosumab injection:

- Sit in a comfortable, upright position.
- Remove the red needle from the syringe and replace it with an orange needle.

- Pick up the syringe and hold it towards the bottom of the barrel as if you are writing your name with a pen.



- With your free hand, pinch your skin at the site you are going to inject and insert the needle at a 90 degree right angle.

- When the needle is in place, release the pinch and press the plunger to release the medicine.



When you have administered the injection, remove the needle from your skin and then dispose of both the

needle and the syringe in the sharps bin provided. Press gently on the site of injection with cotton wool.

## **Risks, cautions and side-effects**

Denosumab is a monoclonal antibody. This type of treatment is also called targeted therapy.

The denosumab vials will be sent to your home address and needs to be stored in the fridge. Keep the vials in the packaging away from food. Only those who have been instructed in the use of denosumab should touch the vials and syringes once they are out of the bag. Always make sure that you keep the denosumab out of reach of children and pets.

## **Side effects of denosumab**

### **Low levels of calcium in the blood**

If you experience tingling in the lips or mouth, twitching or cramps, this can be a sign that calcium level in your blood may be lower than normal. If this occurs, contact the 24 hour urgent advice line to speak to a nurse. Levels of calcium will be monitored in blood tests, calcium and vitamin D supplements will be prescribed if necessary.

## **Bone and muscle pain**

You may experience some achy joints and bones while receiving denosumab. This is most commonly experienced in hands and feet. If this occurs, inform your doctor who can prescribe pain killers for you

## **Jaw problems (osteonecrosis)**

Symptoms of osteonecrosis of the jaw include pain, swelling or gum infections. Before you start your denosumab treatment, you will be asked to visit your dentist for a check-up. If you need any dental treatment this will need to be done prior to starting denosumab.

## **Accidental spillage or needle sticks injuries**

In case of spillage into the eyes, rinse with plenty of water for at least 10 minutes. Contact the day treatment unit/triage ward immediately for further advice.

If any needle stick injury occurs (where the needle has pierced or scratched the skin), seek medical attention immediately by contacting your treatment centre.

## **What happens next?**

You will be given the date and time of your next telephone appointment and the schedule for your blood tests that you need to have. These may need to be done before your next injection. Blood tests are usually done two weeks after the initial dose, before the fourth dose and then eight-weekly thereafter. Information will

be given to you regarding where you can have these blood tests and who will be checking the results

### **Make sure you remember to:**

- Wash your hands before and after giving the injection.
- Handle the syringe and needle carefully.
- Keep the syringes in their box until you need to use them.

**Waste should be disposed of as instructed in the disposal bin provided.**

### **Further information**

If you have any questions or would like further information, you can contact the Finchley Memorial Hospital infusion suite on 020 3758 2379, Monday to Friday, 9am-5pm.

You can also contact the Chase Farm Haematology Oncology day unit on 020 3758 200 ext 52058, Monday to Friday, 9am-4pm.

## More information

For more information about the cancer service at the Royal Free London, visit our website at:

[www.royalfree.nhs.uk/services/services-a-z/cancer-services](http://www.royalfree.nhs.uk/services/services-a-z/cancer-services)

## Your feedback

If you have any feedback on this leaflet or for a list of references for it, please email:

[rf.communications@nhs.net](mailto:rf.communications@nhs.net)

## Alternative formats

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please ask a member of staff.

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