

# Teriparatide (also known as Forsteo)

## Rheumatology Department Patient Information Leaflet

### Introduction

This information leaflet is about a medicine called teriparatide (also known as Forsteo) which is used to treat people with osteoporosis. The leaflet describes how teriparatide is given and some of its benefits and possible side effects.

### What is osteoporosis?

The word osteoporosis literally means spongy (porous) bone. It causes your bones to become fragile so they break more easily.

Bone is a living, active tissue that constantly renews itself. Old bone tissue is broken down by cells called osteoclasts and replaced by new bone material produced by cells called osteoblasts.

The balance between old bone breakdown and new bone formation changes as we grow older in that bone starts to be broken down more quickly than it is replaced, so our bones slowly begin to lose their density. This usually starts at about the age of 40 and continues for the rest of our lives.

We all have some degree of bone loss as we get older but the term osteoporosis is used only when the bones become quite fragile.

This disease is especially common in women after the menopause but it can also occur in men. Osteoporosis is also common in patients receiving steroids (e.g. prednisolone).

Although it may have no symptoms at first, osteoporosis means that your bones are more likely to break, especially in your spine, hips and wrists and it may cause back pain, loss of height and a curved back.

## **What is teriparatide?**

It is similar to a natural hormone in your body (parathyroid hormone) and is a bone formation agent used to make the bones stronger and to reduce the risk of fractures.

## **How should I take teriparatide?**

Teriparatide needs to be injected every day. You will be shown how to do this. It is supplied in pre-filled injection pens that you will need to keep in the fridge.

The recommended dose of teriparatide is 20 micrograms, once a day, by injection under the skin (subcutaneous injection) into the thigh or abdomen (stomach). To help you remember to take it, it is best to inject it at about the same time each day.

Teriparatide can be injected at meal times.

You should inject teriparatide shortly after you take the pen out of the refrigerator, as described in the user manual. Put the pen back into the refrigerator immediately after you have used it. Use a new needle for each injection and dispose of it after each use. Dispose of the needle safely – ask your GP about safe needle disposal. Never store your pen with the needle attached.

Always use teriparatide exactly as your consultant has told you to. You should check with your consultant or pharmacist if you are not sure. Read the user manual booklet, which is included with the medicine, for instructions on how to use the teriparatide pen.

Injection needles are not included with the pen but you can use Becton, Dickinson and Company's insulin pen injection needles. Your consultant will give you information about this.

## How long will I have this treatment?

You will need to inject teriparatide each day for as long as your consultant prescribes it for you. The total duration of treatment with it should not be more than 24 months and you should not receive more than one treatment course of 24 months over your lifetime. This is because tests have found that longer term treatment than this can increase the risk of bone cancer.

## How long will it take to work?

It has been shown by scans that bone mineral density has increased as early as three months after starting teriparatide which means that the bones are stronger.

## Will I have side effects?

Like all medicines, teriparatide can cause side effects although not everybody gets them. The most common side effects are feeling sick, headaches, dizziness, leg pain, increase in blood cholesterol levels, depression, feeling faint, irregular heartbeat, breathlessness, increased sweating, muscle cramps, loss of energy, fatigue and chest pain.

Less common side effects are increased heart rate, low blood pressure, emphysema, hernia, heartburn, haemorrhoids, accidental loss or leakage of urine, increased need to pass water, weight increase, increase in blood calcium level, joint and muscle pain.

Some people may experience discomfort such as redness of the skin, pain, swelling, itching, bruising or minor bleeding around the area of the injection. This should clear up in a few days or weeks but if it does not, please tell your consultant.

Rare side effects include allergic reactions soon after injection, consisting of breathlessness, swelling of the face, rash and chest pain. Other rare side effects include swelling, mainly in the hands, feet and legs, and severe back cramps or pain which could lead to hospitalisation.

Teriparatide may also cause an increase in an enzyme called alkaline phosphatase.

If you become dizzy (lightheaded) after your injection, you should sit or lie down until you feel better. If you do not feel better, you should call your consultant or talk to your GP before you continue treatment.

If any of the side effects get serious, or if you notice any side effects not listed in this leaflet, please tell your consultant or pharmacist.

## **What happens before I am treated?**

You will need to have special blood tests before having teriparatide to check your alkaline phosphatase level and if this is raised, a parathyroid (PTH) blood test will also be carried out. Also, your calcium level will be checked at the start of the treatment and at three-monthly intervals during the time you are receiving the injections.

Please tell your consultant if you:

- have cancer of the bone or have cancer which has spread to your bones
- have bone problems such as Paget's disease
- have kidney problems
- have liver problems
- have, or have recently had, kidney stones
- have previously had radiotherapy

as you may not be able to take this medicine.

## **Can I take my other medication?**

You will be asked to stop taking Fosamax (alendronic acid) or any other bisphosphonate medicine you may be taking but you will need to continue having calcium and/or vitamin D supplements, if you are having these.

Please tell your consultant or pharmacist if you are taking, or have recently taken, any other medicines including medicines obtained without a prescription, because occasionally they may interact with teriparatide and cause problems (e.g. digoxin/digitalis a medicine used to treat heart disease).

## **Can I have immunisation injections?**

Yes, there is no evidence that vaccines of any type should be avoided when you are having teriparatide.

## **Does teriparatide affect fertility or pregnancy?**

Do not use teriparatide if you are pregnant or breastfeeding. If you could become pregnant, you should use effective methods of contraception. If you get pregnant while taking teriparatide, speak to your consultant as soon as possible. Ask your GP or pharmacist for advice before taking any medicine, if you are pregnant.

## **Can I drink alcohol?**

You can drink alcohol within reason. It is recommended that you stay within the national guidelines for alcohol consumption which are set at 21 units per week for men and 14 units per week for women (one unit = half a pint of normal strength beer, one glass of wine or one shot/pub measure of spirit).

## **Can I drive and use machines?**

Some patients may feel dizzy after injecting teriparatide. If you feel dizzy, you should not drive or use machines until you feel better.

## **What if I forget to take teriparatide at my usual time?**

Take it as soon as possible on that day. Do not take a double dose to make up for a forgotten dose. Do not take more than one injection in the same day. Do not try to make up for a missed dose.

## **How do I store teriparatide?**

Keep it out of the reach and sight of children.

Do not use teriparatide after the expiry date which is stated on the carton and pen.

Teriparatide should be stored in a refrigerator (2°C and 8°C) at all times. You can use it for up to 28 days after the first injection as long as the pen is stored at 2°C to 8°C (in a refrigerator).

Do not freeze teriparatide. Avoid placing the pens close to the ice compartment of the refrigerator to prevent freezing. Do not use it if it is, or has been, frozen.

Each pen should be properly disposed of after 28 days, even if it is not completely empty.

Teriparatide pens contain a clear and colourless solution. Do not use it if solid particles (like crystals) appear, or if the solution is cloudy or coloured.

Medicines should not be disposed of down drains or in household waste. Ask your pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.

## Other treatments

You always have the choice when taking any medication prescribed by the Rheumatology Department. Some people find that complementary therapy treatment is useful and leaflets about this, provided by Arthritis Research Council, are available in our clinics.

Over-the-counter medications may be used alone or in combination with prescribed medication you are taking; however, you are always advised to discuss these with your consultant before taking them. Medication bought over the counter may help to control your pain but **not always** the condition. Always tell the pharmacist which prescribed medications you are already taking when buying over-the-counter drugs.

## Can I find out more?

You can find out more from the following:

### National Osteoporosis Society

**Tel:** 0845 450 0230 (9am to 5pm, Monday to Friday)

**Website:** [www.nos.org.uk](http://www.nos.org.uk)

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

Rheumatology helpline on 01384 244789 (this is an answer machine so please do not use this helpline in an emergency)

or speak to your pharmacist

**You can download or print this leaflet from:**

<http://dudleygroup.nhs.uk/services-and-wards/rheumatology/>

**This leaflet can be made available in large print, audio version and in other languages, please call 0800 0730510**

ਜੇਕਰ ਇਹ ਲੀਫਲੈਟ (ਛੋਟਾ ਇਸਤਿਹਾਰ) ਤੁਸੀਂ ਆਪਣੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ਟ ਇੰਨਫਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨਾਲ **0800 0730510** ਟੈਲੀਫੋਨ ਨੰਬਰ ਤੇ ਸੰਪਰਕ ਕਰੋ।

यदि आपको यह दस्तावेज़ अपनी भाषा में चाहिए तो पेशन्ट इनफरमेशन को-आरडीनेटर को टैलीफ़ोन नम्बर **0800 0730510** पर फोन करें।

ਜੇ ਤੁਸੀਂ ਆਪਣੀ ਪੰਜਾਬੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ਟ ਇੰਨਫਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨਾਲ **0800 0730510** 'ਤੇ ਸੰਪਰਕ ਕਰੋ।

আপনি যদি এই প্রচারপত্রটি আপনার নিজের ভাষায় পেতে চান, তাহলে দয়া করে পেশেন্ট ইনফরমেশন কো-অর্ডিনেটরের সাথে **0800 0730510** এই নম্বরে যোগাযোগ করুন।

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حسب شروط الاتفاقية كولينيا (أردو) میں حاصل کرنے کے لئے رومہ پائی ٹیلیفون نمبر **0800 0730510** پر وضاحت انگلش-اردو خط (مربعوں کے لئے معلومات کی فراہمی کے لئے) میں (اردو) کے ساتھ رابطہ کریں۔