

## Zoledronic acid (Myeloma)

The possible benefits of treatment vary; for some people it may reduce the risk of the cancer coming back, for others it may control the cancer and its symptoms. You will find it useful to refer to the booklet *Chemotherapy*, a guide which gives general information on chemotherapy and side effects.

### Your treatment

Your doctor has prescribed for you a medication called zoledronic acid which will be given alongside your main treatment for multiple myeloma. Zoledronic acid is a type of drug called a bisphosphonate. It involves giving the treatment into a vein via an infusion (drip). The treatment is given over 15 minutes.

Your doctor will decide how many infusions you need and how often you should have them.

Bisphosphonates are the central treatment of myeloma bone disease – This is a treatment which works by slowing down the rate of bone change. In the bone there are two types of bone cells: osteoclasts, which break down old bone and osteoblasts which build up new bone. Zoledronic acid stops bones becoming more fragile. This treatment helps to ensure the balance of these cells is correct and bone stays healthy.

Bisphosphonates have several potential beneficial effects, such as:

- Preventing/slowing down further bone breakdown
- Reducing bone pain and the need for painkillers
- Preventing and correcting hypercalcaemia
- Reducing the need for radiotherapy
- Reducing the likelihood of pathological fractures due to myeloma bone disease
- Improving quality of life, particularly by decreasing pain and maintaining mobility
- Improving the chances of healing and recovery of strength of bone.

This treatment can have serious or possibly life-threatening side effects. It is very important that you report side effects straight away. Don't delay, if you feel unwell, please ring The Christie Hotline on **0161 446 3658**. The lines are open 24 hours a day.



## Increased risk of serious infection

You are vulnerable to infection while you are having chemotherapy. Minor infections can become life-threatening in a matter of hours if left untreated. Symptoms of infection include fever, shivering, sweats, sore throat, diarrhoea, discomfort when you pass urine, cough or breathlessness. We recommend that you use a digital thermometer so you can check your temperature. You can buy one from your local chemist. A normal temperature is between 36°C and 37.5°C.

**If your temperature is 37.5°C or above, or below 36°C or you have symptoms of an infection, contact The Christie Hotline straight away**

## Common side effects (more than 1 in 10)

### • Flu-like symptoms

Zoledronic acid may cause flu like symptoms such as fever, fatigue, weakness, drowsiness, headache, chills and aches in your muscles, joints and bones. In most cases you do not need any specific treatment and the symptoms should improve after a short time. However, taking paracetamol can be helpful with these symptoms. A dose pre-infusion and regular paracetamol 2 days post infusion may benefit you.

### • Low calcium levels in the blood

Please contact The Christie Hotline on **0161 446 3658** immediately if you have spasms, twitches, or cramps in your muscles, and/or numbness or tingling in your fingers, toes or around your mouth. You may have low levels of calcium in your blood. Your doctor will monitor this and can offer you treatment if this happens. However, you may be given calcium and vitamin D combination supplements as a preventative measure (after your baseline bloods have been checked) to ensure your calcium remains in the normal range. These will continue for the entire time you are on zoledronic acid.

## Uncommon side effects (less than 1 in 10)

### • Nausea and vomiting, loss of appetite

The severity of this varies from person to person but most people do not have a problem with nausea and vomiting. If you do have these symptoms please contact The Christie adjuvant bisphosphonate service. You may be given anti-sickness medication to take at home.

### • Skin reactions

A skin reaction is not very common. However, sometimes the skin around the infusion site can become red and swollen. Some people may develop a rash and itching. If this happens please tell your doctor or nurse.

### • Conjunctivitis

If you develop red, sore and itchy eyes, please speak to your doctor.

### • Changes in renal function

You will have a blood test each time you have an infusion of zoledronic acid. This test is to ensure your corrected calcium and kidney function are within the normal range.

## Rare side effects (less than 1 in 100)

### • Osteonecrosis of the jaw (Warning!)

Very occasionally, a rare side effect can occur with zoledronic acid, when there is necrosis (a loss of bone) or a breakdown of the jaw bone. It is called osteonecrosis of the jaw (ONJ) and can be a serious condition. Some of the symptoms are:

- pain, swelling or infection of the gums
- loosening of the teeth
- poor healing of the gums
- numbness or feeling of heaviness in the jaw

## Dental guidance

### What to do before commencing zoledronic acid

It is essential that you have a dental examination with a dentist before you start treatment with zoledronic acid. If you need any dental work, this must be done before you start this treatment.

### How to access an NHS dentist

There is no need to register with a dentist in the same way as with a GP because you are not bound to a catchment area. Simply find a dental practice that's convenient for you, whether it's near your home or work, and phone them to see if there are any appointments available. If you do not have a regular dental practice or are new to the area, you can search for an NHS dentist near you on the NHS choices website.

### If you need any dental treatment while taking zoledronic acid.

While you are having treatment with zoledronic acid, you should try to avoid invasive dental procedures for example having teeth removed. For non-invasive procedures such as tooth fillings, please speak to your dentist or Christie contact.

If you do have to have teeth removed **while you are having treatment** with zoledronic acid or **soon after finishing treatment** with zoledronic acid, it is important to discuss this with the Christie adjuvant bisphosphonate service contact first. They may be able to offer advice on the most appropriate way to proceed.

### Dental health and check ups

Try to keep your mouth clean and healthy at all times. You can continue to see your dentist for your normal, regular check-ups and cleaning (but not treatment). You can also see your dental hygienist. Show them this leaflet and the dental letter, as it is important that the dentist and dental hygienist know that you are receiving zoledronic acid.

**If you have any of the symptoms listed above or any other dental problems tell your Christie contact immediately.**

## Very rare side effects (less than 1 in 10,000)

### • Atypical fractures

Unusual fractures of the hip bone have been reported in patients receiving bisphosphonates. This usually occurs after very long term treatment with a bisphosphonate for osteoporosis. Such fractures are not usually the result of trauma. Please report any unusual hip, groin or thigh pain developed whilst on treatment.

## Contacts

If you have any general questions or concerns about your treatment, please contact the Haematology Team.

- Lisa Jeffrey, Emma Whitham and Decima Govett      **0161 918 7962**  
Haematology Clinical Nurse Specialists
- Haematology and Transplant day unit      **0161 446 3924**
- General enquiries      **0161 446 3000**
- For urgent advice ring The Christie Hotline      **0161 446 3658** (24 hours)

Your consultant is: .....

Your hospital number is: .....

Your key worker is: .....

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The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for  
urgent support and specialist advice  
**The Christie Hotline: 0161 446 3658**  
Open 24 hours a day, 7 days a week