



Australian
Rheumatology
Association

PATIENT INFORMATION ON BISPHOSPHONATES (INTRAVENOUS / IV)

(Examples of brand names: Aclasta, Aredia)

This information sheet has been produced by the Australian Rheumatology Association to help you understand the medicine that has been prescribed for you. It includes important information about:

- **How you should take your medicine;**
- **The possible side effects; and**
- **Other precautions you should take while taking bisphosphonates.**

Please read it carefully and discuss with your doctor.

What are bisphosphonates?

Bisphosphonates are medicines used to treat bone diseases such as osteoporosis and Paget's disease. Pamidronate (brand name Aredia) zolendronate (brand name Aclasta) are the most commonly prescribed intravenous bisphosphonates in Australia.

Osteoporosis is a common disease, which causes bones to become fragile and brittle. This means bones can break (fracture) more easily, even as a result of normal activity (as distinct from a fall). Fractures may be painful and restrict a person's ability to carry out their normal daily tasks. In osteoporosis, bisphosphonates reduce the risk of a fracture occurring.

For more information about OSTEOPOROSIS see the Osteoporosis Australia website <http://www.osteoporosis.org.au/> or phone Osteoporosis Australia on 1800 242 141.

In Paget's disease, the formation of abnormal bone causes deformity and pain.

Bisphosphonate medicines can help this.

How do they work?

Bone is constantly changing, with old bone breaking down and new bone formed to take its place. This usually happens in a balanced way. If the cycle becomes unbalanced, bone is broken down faster than it is replaced. This leads to osteoporosis.

Bisphosphonates are medicines that slow or stop the bone breaking down. As a result, bone density may increase over time so fewer fractures may occur.

What benefit can you expect from your treatment?

Since osteoporosis doesn't usually have any symptoms such as pain, you will not 'feel' any immediate benefit from your treatment with bisphosphonates. If used for Paget's disease, bone pain may lessen with time. Your doctor will explain the likely benefits for you.

You may be asked to have tests to check the effect of treatment on your bones. For example, a bone mineral density test is usually done after one to two years of treatment. This is a type of X-ray which involves a very small amount of radiation.

Sometimes tests of urine or blood are used to measure the effects of treatment on bone formation and breakdown.

How are bisphosphonates given?

Bisphosphonate injections are given as a drip (infusion) into the vein. The infusion will take between twenty minutes and four hours depending on the type of bisphosphonate being given and the condition being treated.

After the infusion, you may have to remain at the clinic for observation for at least one hour, in case of side effects.

When should they be given?

Bisphosphonate injections may be given once a year or every three months depending on the type prescribed and the condition being treated.

What is the dosage?

Bisphosphonate injections come in different doses. The dose and how often it is given will depend on the type of bisphosphonates being used and the condition being treated.

Can other medicines be taken with bisphosphonates?

It is safe to use most other medicines when you are having bisphosphonate infusions (see *Precautions* on page 3).

Your doctor may suggest that you take paracetamol and an anti-allergy tablet on the day of your infusion.

Your doctor is likely to advise you to take a calcium and vitamin D supplement.

How long is the treatment continued?

For osteoporosis, treatment with bisphosphonates is usually given for two to five years. Your doctor will review your progress each year. For Paget's disease the treatment plan may be shorter.

Are there any side effects?

Most people who have bisphosphonate injections do not experience side effects. Below are some side effects that you might experience with your treatment. Tell your doctor if you experience any problems.

A reduction in dose or change to another medicine may minimise the side effects so that

you can continue to have treatment for your bones.

Tell your doctor if you experience any side effects.

Most common possible side effects:

- The most common side effect is a *rise in temperature*, typically at the start of treatment, with *flu-like symptoms* such as aching muscles. Rarely the fever may last for one or two days. Giving the medicine slowly and taking regular paracetamol for 24 -48 hours reduces the likelihood of this happening.
- Some *irritation* at the site of injection may occur.
- Intravenous bisphosphonates can cause *nausea, loss of appetite* and a *skin rash*. These effects will not last for long.
- Bisphosphonates have been found to cause *mouth ulcers, aching muscles, joints and/or bones* and *swelling of joints*.

Less common or rare possible side effects:

- A potentially serious but very rare side effect with bisphosphonates is *osteonecrosis of the jaw (ONJ)*. This presents with jaw pain. It usually occurs after dental work which does not heal properly. There are a few reports in osteoporosis patients, and it is seen mostly in cancer patients receiving monthly treatment. For most patients receiving bisphosphonate injections, the benefits outweigh the potential risk of ONJ because fractures can be associated with significant complications and even death. As a precaution, it is recommended that dental infections should be treated, and planned extractions performed before starting bisphosphonate treatment.
- *Blurred vision, pain or redness* in the eye (called iritis) may occur and may need to be treated with eye drops. If this occurs, see you doctor.

- An increased frequency of *heart palpitations* (feeling of fast or irregular heartbeat), has been seen in some patients with zoledronate.

What precautions are necessary?

Care of your teeth and mouth:

- Before starting bisphosphonate treatment, have your teeth checked by your dentist. If surgery on the jaw bone is necessary, this should be done before you start the treatment.
- While having treatment with bisphosphonates maintain good oral hygiene and have regular dental checkups.

Blood tests:

- Monitoring blood tests are not usually required for people having bisphosphonate treatment, although in certain situations these may be needed.

Other medicines:

- You should tell your doctor (including your general practitioner, rheumatologist and others) about all medicines you are taking or plan to take. This includes over

the counter or herbal/naturopathic medicines. You should also mention your treatment when you see other health professionals.

- Bisphosphonates should not be taken with the osteoporosis medications strontium or raloxifene.
- The risk of side effects from the low doses of aspirin used to prevent heart attack and strokes is not increased when taken with bisphosphonates.
- Methotrexate can be taken safely with bisphosphonates.
- The simple pain reliever paracetamol, and combined medicines such as Panadeine and Panadeine Forte, can be used while you are receiving bisphosphonate injections.

Pregnancy and breastfeeding:

- Bisphosphonates are not recommended to be taken during pregnancy or during breastfeeding. If you are planning a family or become pregnant you should discuss this with your doctor as soon as possible.

All patients taking bisphosphonates should be seen regularly by the doctor who prescribed the medicine to optimise treatment and to minimise any potential side effects.

If you have any questions or concerns write them down and discuss them with your doctor.

Your doctor's contact details:

REMEMBER – Keep all medicines out of reach of children

The information in this sheet has been obtained from various sources and has been reviewed by the Australian Rheumatology Association. It is intended as an educational aid and does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned.

This information is not intended as medical advice for individual problems nor for making an individual assessment of the risks and benefits of taking a particular medicine. It can be reproduced in its entirety but cannot be altered without permission from the ARA.

The NHMRC publication: *How to present the evidence for consumers: preparation of consumer publications* (2000) was used as a guide in developing this publication.