



PATIENT INFORMATION ON BISPHOSPHONATES (TABLETS)

(Examples of brand names: for alendronate - Adronat, Alendrobell, Alendro, Fosamax, Fosamax Plus, Fosamax D, Ossmax; for risedronate – Acris Once-a-Week, Actonel, Actonel Combi, Actonel Combi D, Actonel EC, Actonel Once-a-Month, Risedro once a week)

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**
- **other precautions you should take while taking bisphosphonates.**

Please read it carefully and discuss it with your doctor.

What are bisphosphonates?

Bisphosphonates are medicines used to treat bone diseases such as osteoporosis and Paget’s disease. Alendronate and risedronate are the most commonly prescribed bisphosphonate tablets in Australia.

Osteoporosis is a common disease, which causes bones to become fragile and brittle so that they 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 broken bone or fracture.

In Paget’s disease, the formation of abnormal bone causes deformity and pain. Bisphosphonate medicines can help this.

Important things to remember

- To reduce side effects such as inflammation of the oesophagus or stomach, and to make sure the tablets work properly, it is important that you follow the instructions given to you about how to take the medicine.
- You must stay upright (i.e. sitting, standing or walking around) for at least 30 minutes after swallowing the tablets.
- You should also take the tablets with a glass of plain water, not mineral water. Minerals, including mineral water, can stop the bisphosphonate absorption.
- Some bisphosphonates may be taken with food, while others must be taken on an empty stomach.
- It is best to take the tablets first thing in the morning.
- You should generally wait for at least half an hour before taking any other medicines.

Ask your doctor to explain exactly what medicine you are taking and how to take it properly.

Bisphosphonates should also not be taken with other osteoporosis medicines such as denosumab (Prolia), raloxifene (Evista), strontium (Protos) or teriparatide (Forteo).

For more information about OSTEOPOROSIS see the Osteoporosis Australia website

<http://www.osteoporosis.org.au/>
or phone Osteoporosis Australia on 1800 242 141.

How do they work?

Bone is constantly changing with old bone breaking down and new bone being 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 slow or stop the bone breaking down. As a result, bone density may increase over time so the risk of fractures is reduced.

What benefit can you expect from your treatment?

Since osteoporosis doesn't usually have any symptoms such as pain (until a fracture occurs) 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 relevant to 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.

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

How are bisphosphonates taken?

Bisphosphonates come as tablets, but can also be given by injection (see separate information sheet).

It is important to follow the directions carefully to avoid side effects and to make sure the tablets work properly. See *Important things to remember* on the first page of this sheet, and ask your doctor about the instructions relevant to the medicine you have been prescribed.

What is the dosage?

Tablets come in different strengths. The dose will depend on the type of bisphosphonate being taken and the condition for which it is being used.

For osteoporosis, the medicines are taken as a single tablet once a week or once a month for a number of years.

For Paget's disease they are usually taken daily for a limited period. Always follow the instructions provided in the packaging unless otherwise directed by a doctor.

Are other medicines taken with bisphosphonates?

It is safe to use most other medicines when you are taking bisphosphonates (see *Precautions* on page 3). However, bisphosphonates should not be taken with some other osteoporosis medicines (refer *Precautions*, page 3)

It is also important not to take other medicines within 30 minutes of taking bisphosphonate tablets.

Your doctor will usually recommend you to take calcium and vitamin D supplements as well as your bisphosphonate. Some bisphosphonates are packaged in combination with vitamin D or calcium.

How long is the treatment continued?

For osteoporosis, treatment with bisphosphonates is usually given for at least five years. Your doctor will review your progress each year.

For Paget's disease, the treatment may be given for a shorter period of time.

Are there any side effects?

Most people who take bisphosphonate tablets do not experience side effects. Tell your doctor if you are concerned about possible side effects.

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.

Most common possible side effects

- Bisphosphonate tablets may cause *inflammation of the oesophagus or stomach* resulting in stomach pain, heartburn, feeling sick (nausea), vomiting, constipation or diarrhoea.
- *Headache and/or dizziness* may occur.
- *Mouth ulcers, aching muscles, joints and/or bones and swelling of joints* may also occur but do not last for long.

Less common or rare possible side effects

- A potentially serious but very rare side effect with bisphosphonates is *osteonecrosis of the jaw (ONJ)*. This condition presents with jaw pain. It usually occurs after dental work which does not heal properly. For most patients who are taking oral bisphosphonates, the benefits of these medicines outweigh the potential risk of ONJ. As a precaution, it is recommended that any dental infections should be treated and any planned extractions be performed before starting bisphosphonate treatment.
- Bisphosphonates can cause *skin reactions* such as rash or redness of the skin, which is sometimes made worse by sunlight. They can also cause *itchiness*.
- *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 your doctor.

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 jawbone is necessary, this should be done before you start the treatment.

- While taking a bisphosphonate, maintain good oral hygiene and have regular dental check-ups.

Blood tests

- Monitoring blood tests are not usually required for people taking bisphosphonates for osteoporosis, although in certain situations these may be needed.
- In Paget's disease, your doctor may ask you to have a blood test to measure bone turnover and response to treatment.

Use with other medicines

- It is important not to take other medicines within 30 minutes of taking bisphosphonate tablets.
- 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 other osteoporosis medicines such as denosumab (Prolia), raloxifene (Evista), strontium (Protos) or teriparatide (Forteo).
- 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.
- Nonsteroidal anti-inflammatories (NSAIDs) may also cause inflammation of the oesophagus and stomach so your doctor may advise you not to take NSAIDs if you are taking a bisphosphonate.
- 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 taking bisphosphonates provided you take them as directed.
- The absorption of bisphosphonates from the stomach can be reduced by over the counter antacids such as Gaviscon, Mylanta and Rennie's and by prescribed medicines such as omeprazole (Acimax/Losec) or esomeprazole (Nexium).

Use with alcohol

- Because these medicines can increase your risk of stomach inflammation, you should avoid heavy alcohol use while taking them. Drinking more than 4 standard drinks on one occasion, even if infrequently, is strongly discouraged.

Use in pregnancy and breastfeeding

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

How to store bisphosphonates?

- Store bisphosphonate tablets in a cool, dry place, away from direct heat and light.
- Keep all medicines out of reach of children.

Questions?

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

Your doctor's contact details

If you are taking bisphosphonates you should see your doctor regularly to make sure the treatment is working and to minimise any possible side effects.

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.