

Zobis®

Zoledronic acid

Concentrate for Solution for Infusion

Read this leaflet carefully before you start taking Zobis®. This leaflet provides answers to the most common questions. If you have any further questions, ask your doctor or pharmacist. This medicine has been prescribed for your current illness only. Do not take it in similar conditions and do not pass it on to others. The information in this leaflet was last updated on the date listed on the bottom of the page. More recent information on the medicine may be available. You should ensure that you speak to your doctor or pharmacist to obtain the most up-to-date scientific information on the medicine. The latest version of this leaflet is available on www.nanoalvand.com.

What is in this leaflet

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1. What Zobis® is and what it is used for

The active substance in Zobis® is zoledronic acid, which belongs to a group of substances called bisphosphonates. Zoledronic acid works by attaching itself to the bone and slowing down the rate of bone change. It is used:

- to prevent bone complications, e.g. fractures, in adult patients with bone metastases (spread of cancer from primary site to the bone).
- to reduce the amount of calcium in the blood in adult patients where it is too high due to the presence of a tumor. Tumors can accelerate normal bone change in such a way that the release of calcium from bone is increased. This condition is known as tumor-induced hypercalcemia (TIH).

2. What you need to know before you use Zobis®

Follow carefully all instructions given to you by your doctor.

Your doctor will carry out blood tests before you start treatment with Zobis® and will check your response to treatment at regular intervals.

Do not use Zobis®

- if you are allergic to zoledronic acid, another bisphosphonate (the group of substances to which Zobis® belongs), or any of the other ingredients of this medicine (listed in section 6).
- if you are breast-feeding.

Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Zobis®

- if you have or have had a kidney problem.
- if you have or have had pain, swelling or numbness of the jaw, a feeling of heaviness in the jaw or loosening of a tooth. Your doctor may recommend a dental examination before you start treatment with Zobis®.
- if you are having dental treatment or are due to undergo dental surgery, tell your dentist that you are being treated with Zobis® and inform your doctor about your dental treatment. While being treated with Zobis®, you should maintain good oral hygiene (including regular teeth brushing) and receive routine dental check-ups.

Contact your doctor and dentist immediately if you experience any problems with your mouth or teeth such as loose teeth, pain or swelling, or non-healing of sores or discharge, as these could be signs of a condition called osteonecrosis of the jaw.

Patients who are undergoing chemotherapy and/or radiotherapy, who are taking steroids, who are undergoing dental surgery, who do not receive routine dental care, who have gum disease, who are smokers, or who were previously treated with a bisphosphonate (used to treat or prevent bone disorders) may have a higher risk of developing osteonecrosis of the jaw.

Reduced levels of calcium in the blood (hypocalcemia), sometimes leading to muscle cramps, dry skin, burning sensation, have been reported in patients treated with zoledronic acid. Irregular heart beat (cardiac arrhythmia), seizures, spasm and twitching (tetany) have been reported as secondary to severe hypocalcemia. In some instances, the hypocalcemia may be life-threatening. If any of these apply to you, tell your doctor straight away. If you have pre-existing hypocalcemia, it must be corrected before initiating the first dose of Zobis®. You will be given adequate calcium and vitamin D supplements.

Elderly

Zobis® can be given to people aged 65 years and over. There is no evidence to suggest that any extra precautions are needed.

Children and adolescents

Zobis® is not recommended for use in adolescents and children below the age of 18 years.

Other medicines and Zobis®

Tell your doctor if you are taking, have recently taken or might take any other medicines. It is especially important that you tell your doctor if you are also taking:

- Aminoglycosides (medicines used to treat severe infections), calcitonin (a type of medicine used to treat post-menopausal osteoporosis and hypercalcemia), loop diuretics (a type of medicine to treat high blood pressure or edema) or other calcium-lowering medicines, since the combination of these with bisphosphonates may cause the calcium level in the blood to become too low.
- Thalidomide (a medicine used to treat a certain type of blood cancer involving the bone) or any other medicines which may harm your kidneys.
- Zoledronic acid 5 mg/100 ml (a medicine used to treat osteoporosis and other non-cancer diseases of the bone), or any other bisphosphonate, since the combined effects of these medicines taken together with Zobis® are unknown.
- Anti-angiogenic medicines (used to treat cancer), since the combination of these with Zobis® has been associated with an increased risk of osteonecrosis of the jaw (ONJ).

Pregnancy, breast-feeding

Pregnancy

You should not be given Zobis® if you are pregnant. Tell your doctor if you are or think that you may be pregnant.

Breast-feeding

You must not be given Zobis® if you are breast-feeding.

Driving and using machines

There have been very rare cases of drowsiness and sleepiness with the use of Zobis®. You should therefore be careful when driving, using machinery or performing other tasks that need full attention.

Zobis® contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially "sodium free". If your doctor uses a solution of common salt to dilute Zobis®, the dose of sodium received would be larger.

3. How to use Zobis®

Always use this medicine exactly as your doctor has told you. Check with your doctor if you are not sure.

Zobis® must only be given by healthcare professionals trained in administering bisphosphonates intravenously, i.e. through a vein.

Your doctor will recommend that you drink enough water before each treatment to help prevent dehydration.

Carefully follow all the other instructions given to you by your doctor, pharmacist or nurse.

How much is Zobis® given

- The usual single dose given is 4 mg.
- If you have a kidney problem, your doctor will give you a lower dose depending on the severity of your kidney problem.

How often Zobis® is given

- If you are being treated for the prevention of bone complications due to bone metastases, you will be given one infusion of Zobis® every three to four weeks.
- If you are being treated to reduce the amount of calcium in your blood, you will normally only be given one infusion of Zobis®.

How Zobis® is given

- Zobis® is given as a drip (infusion) into a vein which should take at least 15 minutes and should be administered as a single intravenous solution in a separate infusion line.

Patients whose blood calcium levels are not too high will also be prescribed calcium and vitamin D supplements to be taken each day.

If you are given more Zobis® than you should be

If you have received doses higher than those recommended, you must be carefully monitored by your doctor. This is because you may develop serum electrolyte abnormalities (e.g. abnormal levels of calcium, phosphorus and magnesium) and/or changes in kidney function, including severe kidney impairment. If your level of calcium falls too low, you may have to be given supplemental calcium by infusion.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them. The most common ones are usually mild and will probably disappear after a short time.

Serious side effects

Tell your doctor about any of the following serious side effects straight away:

Common (may affect up to 1 in 10 people)

- severe kidney impairment (will normally be determined by your doctor with certain specific blood tests)
- low level of calcium in the blood

Uncommon (may affect up to 1 in 100 people)

- pain in the mouth, teeth and/or jaw, swelling or non-healing sores inside the mouth or jaw, discharge, numbness or a feeling of heaviness in the jaw, or loosening of a tooth. These could be signs of bone damage in the jaw (osteonecrosis). Tell your doctor and dentist immediately if you experience such symptoms while being treated with Zobis® or after stopping treatment.
- irregular heart rhythm (atrial fibrillation) has been seen in patients receiving zoledronic acid for postmenopausal osteoporosis. It is currently unclear whether zoledronic acid causes this irregular heart rhythm but you should report it to your doctor if you experience such symptoms after you have received Zobis®.
- severe allergic reaction: shortness of breath, swelling mainly of the face and throat

Rare (may affect up to 1 in 1,000 people)

- as a consequence of low calcium values: irregular heart beat (cardiac arrhythmia; secondary to hypocalcemia)
- a kidney function disorder called Fanconi syndrome (will normally be determined by your doctor with certain urine tests)

Very rare (may affect up to 1 in 10,000 people)

- as a consequence of low calcium values: seizures, numbness and tetany (secondary to hypocalcemia)
- talk to your doctor if you have ear pain, discharge from the ear, and/or an ear infection. These could be signs of bone damage in the ear.
- osteonecrosis has also very rarely been seen occurring with other bones than the jaw, especially the hip or thigh. Tell your doctor immediately if you experience symptoms such as new onset or worsening of aches, pain or stiffness while being treated with Zobis® or after stopping treatment.

Other side effects

Tell your doctor about any of the following side effects as soon as possible:

Very common (may affect more than 1 in 10 people)

- low level of phosphate in the blood

Common (may affect up to 1 in 10 people)

- headache and a flu-like syndrome consisting of fever, fatigue, weakness, drowsiness, chills and bone, joint and/or muscle ache. In most cases no specific treatment is required and the symptoms disappear after a short time (couple of hours or days)
- gastrointestinal reactions such as nausea and vomiting as well as loss of appetite.
- conjunctivitis
- low level of red blood cells (anemia)

Uncommon (may affect up to 1 in 100 people)

- hypersensitivity reactions
- low blood pressure
- chest pain
- skin reactions (redness and swelling) at the infusion site, rash, itching
- high blood pressure, shortness of breath, dizziness, anxiety, sleep disturbances, taste disturbances, trembling, tingling or numbness of the hands or feet, diarrhea, constipation, abdominal pain, dry mouth
- low counts of white blood cells and blood platelets
- low level of magnesium and potassium in the blood. Your doctor will monitor this and take any necessary measures.
- weight increase
- increased sweating
- sleepiness
- blurred vision, tearing of the eye, eye sensitivity to light
- sudden coldness with fainting, limpness or collapse
- difficulty in breathing with wheezing or coughing
- urticaria

Rare (may affect up to 1 in 1,000 people)

- slow heartbeat
- confusion
- unusual fracture of the thigh bone particularly in patients on long-term treatment for osteoporosis may occur rarely. Contact your doctor if you experience pain, weakness or discomfort in your thigh, hip or groin as this may be an early indication of a possible fracture of the thigh bone.
- interstitial lung disease (inflammation of the tissue around the air sacs of the lungs)

- flu-like symptoms including arthritis and joint swelling

- painful redness and/or swelling of the eye

Very rare (may affect up to 1 in 10,000 people)

- fainting due to low blood pressure
- severe bone, joint and/or muscle pain, occasionally incapacitating

5. How to store Zobis®

- Keep this medicine out of the sight and reach of children.
- Do not use this medicine after the expiry date.
- Store below 30°C.
- Store in the original package in order to protect from light.
- Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What Zobis® contains

The active substance is zoledronic acid (as monohydrate).

The other ingredients are mannitol, water for injection, and tri-sodium citrate.

Each 5 ml vial contains 4.264 mg zoledronic acid monohydrate, corresponding to 4 mg zoledronic acid.

What Zobis® looks like and contents of the pack

Zobis® is supplied in single use glass vials as concentrate for solution for infusion.

Each vial is packed in a box with a leaflet.

For medical or healthcare professionals only

How to prepare and administer Zobis®

- To prepare an infusion solution containing 4 mg zoledronic acid, further dilute the Zobis® concentrate with 100 ml of calcium-free or other divalent cation-free infusion solution. Aseptic techniques must be followed during the preparation of the infusion.

- If a lower dose of Zobis® is required, first withdraw the appropriate volume as indicated below and then dilute it further with 100 ml of infusion solution. To avoid potential incompatibilities, the infusion solution used for dilution must be either sodium chloride 0.9% or dextrose 5% solution.

For preparing reduced doses of Zobis® withdraw the appropriate volume of the liquid concentrate, as follows:

- 4.4 ml for 3.5 mg dose
- 4.1 ml for 3.3 mg dose
- 3.8 ml for 3 mg dose

- Do not mix Zobis® concentrate with calcium-containing or other divalent cation containing solutions such as lactated Ringer's solution.
- For single use only. Any unused solution should be discarded. Only clear solution free from particles and discoloration should be used.

- Following dilution, chemical and physical in-use stability has been demonstrated for 30 hours at room temperature (below 30°C) and refrigerator (2°C to 8°C).

- From a microbiological point of view, the diluted solution for infusion should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user.

- The solution containing zoledronic acid should be given as a single 15-minute intravenous infusion in a separate infusion line. The hydration status of patients must be assessed prior to and following administration of Zobis® to ensure that they are adequately hydrated.

- Studies with several types of infusion lines made from polyvinylchloride, polyethylene and polypropylene showed no incompatibility with zoledronic acid.

- Since no data are available on the compatibility of Zobis® with other intravenously administered substances, Zobis® must not be mixed with other medications/substances and should always be given through a separate infusion line.

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Manufactured by Nano Fanavarar Darouei Alvand (NanoAlvand)

Address: W. 7th St., Simin Dasht Industrial Area, Karaj, Alborz, Iran.
Tel: +9826-36671187
Fax: +9826-36671187
E-mail: info@nanoalvand.com
URL: www.nanoalvand.com

