



# MEDISTAR<sup>®</sup> 5 mg/100 mL, solution for infusion

## Zoledronic acid monohydrate

Read the entire leaflet carefully before you start taking this medicine.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.
- If any of the side effects gets serious, or if you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

### In this leaflet

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#### 1. WHAT MEDISTAR<sup>®</sup> 5 MG/100 MLIS AND WHAT IT IS USED FOR?

MEDISTAR<sup>®</sup> 5 MG/100 ML contains an active substance called zoledronic acid. It belongs to the class of medications called bisphosphonates and is used for:- Treatment of osteoporosis in postmenopausal women and men - Prevention of femoral neck fractures after femoral neck fracture in men and women - Treatment And prevention of glucocorticoid-induced osteoporosis in men and women - Treatment of Paget's disease of bone (Osteodystrophy deformans).

**Osteoporosis**  
Osteoporosis is a disease that involves the thinning and weakening of the bones and is common in women after the menopause, but can also occur in men. At the menopause, a woman's ovaries stop producing the female hormone oestrogen, which helps to keep her bones healthy. Following the menopause bone loss occurs, bones become weaker and break more easily. Osteoporosis could also occur in men and women because of the long term use of steroids, which can affect the strength of bones. Many patients with osteoporosis have fractures, which are still at risk of breaking bones because osteoporosis has made their bones weaker. Decreased circulating levels of sex hormones, mainly oestrogens converted from androgens, also play a role in the more gradual bone loss observed in men. In both women and men, MEDISTAR<sup>®</sup> 5 MG/100 ML strengthens the bone and therefore makes it less likely to break. MEDISTAR<sup>®</sup> 5 MG/100 ML is also used in patients who have recently broken their hip in a minor trauma such as a fall and therefore are at risk of subsequent bone breaks.

#### Paget's disease of the bone

It is normal that old bone is removed and is replaced with new bone material. This process is called remodelling. Paget's disease, however, is a disease where new bone is formed in a disordered fashion, which makes it weaker than normal. If the disease is not treated, bones may become deformed and painful, and may break. MEDISTAR<sup>®</sup> 5 MG/100 ML works by returning the bone remodelling process to normal, securing formation of normal bone. This restores your bones to their normal strength.

**2. WHAT YOU NEED TO KNOW BEFORE YOU ARE GIVEN MEDISTAR<sup>®</sup> 5 MG/100 ML?** Follow all instructions given to you by your doctor, pharmacist or nurse carefully before you are given MEDISTAR.

#### You must not be given MEDISTAR:

- if you are allergic to zoledronic acid, other bisphosphonates or any of the other ingredients of this medicine (listed in section 6).
  - if you have hypocalcaemia (this means that the levels of calcium in your blood are too low).
  - if you have severe kidney problems.
  - if you are pregnant.
  - if you are breast-feeding.
- Talk to your doctor or your pharmacist before you are given Medistar:
- if you are being treated with any medicine containing zoledronic acid, which is also the active substance of MEDISTAR<sup>®</sup> 5 MG/100 ML (zoledronic acid is used in adult patients with certain types of cancer to prevent bone complications or to reduce the amount of calcium).
  - if you have a kidney stone or are taking medicine to help you to urinate.
  - if you are unable to take daily calcium supplements.
  - if you have had some or all of the parathyroid glands in your neck surgically removed.
  - if you have had sections of your intestine removed.

A side effect called osteonecrosis of the jaw (ONJ) (bone damage in the jaw) has been reported in the post-operative patients receiving zoledronic acid for osteoporosis. ONJ can also occur after stopping ONJ development. It is a painful condition that can be difficult to treat. In order to reduce the risk of developing osteonecrosis of the jaw, there are some situations you should take care of:

- Before receiving MEDISTAR<sup>®</sup> 5 MG/100 ML treatment, tell your doctor, pharmacist or nurse if:
  - you have any problems with your mouth or teeth such as poor dental health, gum disease, or a planned tooth extraction
  - you do not receive routine dental care or have not had a dental check-up for a long time;
  - you are a smoker (as this may increase the risk of dental problems);
  - you have previously been treated with a bisphosphonate (used to treat or prevent bone disorders);
  - you are taking medicines called corticosteroids (such as prednisolone or dexamethasone) - you have cancer.

Your doctor may ask you to undergo a dental examination before you start treatment with Medistar.

While being treated with Medistar, you should maintain good oral hygiene (including regular teeth brushing) and receive routine dental check-ups. If you wear dentures you should make sure these fit properly. If you are under dental treatment or are due to undergo dental surgery (e.g. tooth extractions) tell your doctor about your dental treatment and tell your dentist that you are being treated with Medistar. Contact your doctor and dentist immediately if you experience any problems with your mouth or teeth such as loose teeth, pain or swelling, or the shedding of sores or discharge, as these could be signs of osteonecrosis of the jaw.

#### Monitoring test

Your doctor should do a blood test to check your kidney function (levels of creatinine) before each dose of Medistar. It is important for you to drink at least 2 glasses of fluid (such as water), within a few hours before receiving Medistar, as directed by your healthcare provider.

**Children and adolescents**  
Zoledronic acid is not recommended for anyone under 18 years of age. The use of MEDISTAR<sup>®</sup> 5 MG/100 ML in children and adolescents has not been studied.

**Other medicines**  
MEDISTAR<sup>®</sup> 5 MG/100 ML  
Tell your doctor, pharmacist or nurse if you are taking, have recently taken or might take any other medicines.

It is important for your doctor to know all the medicines you are taking, especially if you are taking any medicines known to be harmful to your kidneys (e.g. aminoglycosides) or diuretics ("waterpills") that may cause dehydration.

#### Pregnancy and breast-feeding

You must not be given MEDISTAR<sup>®</sup> 5 MG/100 ML if you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby. Ask your doctor, pharmacist or nurse for advice before taking this medicine.

#### Driving and using machines

If you feel dizzy while taking Medistar, do not drive or use machines until you feel better.

#### MEDISTAR<sup>®</sup> 5 MG/100 ML contains sodium

This medicinal product contains less than 1 mmol sodium (23 mg) per 100 mL vial of Medistar, i.e., essentially "sodium free".

#### 3. HOW MEDISTAR<sup>®</sup> 5 MG/100 ML IS GIVEN

Follow carefully all instructions given to you by your doctor or nurse. Check with your doctor or nurse if you are not sure.

#### Osteoporosis

The usual dose is 5 mg given as one infusion per year into a vein by your doctor or nurse. The infusion will take at least 15 minutes.

In case you recently broke your hip, it is recommended that MEDISTAR<sup>®</sup> 5 MG/100 ML is administered two or more weeks after your hip repair surgery.

It is important to take calcium and vitamin D supplements (for example tablets) as directed by your doctor.

For osteoporosis, MEDISTAR<sup>®</sup> 5 MG/100 ML works for one year. Your doctor will let you know when to return for your next dose.

#### Paget's disease

For the treatment of Paget's disease, MEDISTAR<sup>®</sup> 5 MG/100 ML should be prescribed only by physicians with experience in the treatment of Paget's disease of the bone.

The usual dose is 5 mg given as one infusion into a vein by your doctor or nurse.

The infusion will take at least 15 minutes. MEDISTAR<sup>®</sup> 5 MG/100 ML may work for longer than one year, and your doctor will let you know if you need to be treated again.

Your doctor may advise you to take calcium and vitamin D supplements (e.g. tablets) for at least the first ten days after taking Medistar. It is important that you follow this advice carefully so that the level of calcium in your blood does not become too low in the period after the infusion. Your doctor will inform you regarding the symptoms associated with hypocalcaemia.

#### MEDISTAR<sup>®</sup> 5 MG/100 ML with food and drink

Make sure you drink enough fluids (at least one or two glasses) before and after the treatment with Medistar, as directed by your doctor. This will help to prevent dehydration. You may eat normally on the day you are treated with Medistar. This is especially important in patients who take diuretics ("water pills") and in elderly patients (age 65 years or over).

#### If you missed a dose of MEDISTAR<sup>®</sup> 5 MG/100 ML

Contact your doctor or hospital as soon as possible to re-schedule your appointment.

#### Before stopping MEDISTAR<sup>®</sup> 5 MG/100 ML therapy

If you are considering stopping MEDISTAR<sup>®</sup> 5 MG/100 ML treatment, please go to your next appointment and discuss this with your doctor. Your doctor will advise you and decide how long you should be treated with Medistar.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

#### 4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them. Side effects related to the first infusion are very common (occurring in more than 30% of patients) but are less common following subsequent infusions. The majority of the side effects, such as fever and chills, pain in the muscles or joints, and headache, occur within the first three days following the dose of Medistar. The symptoms are usually mild to moderate and go away within three days. Your doctor can recommend a mild pain reliever such as ibuprofen or paracetamol to reduce these side effects. The chance of experiencing these side effects decreases with subsequent doses of Medistar.

#### Some side effects should be serious

Confusion (may affect up to 1 in 10 people)  
Irregular heart rhythm (atrial fibrillation) has been seen in patients receiving MEDISTAR<sup>®</sup> 5 MG/100 ML for the treatment of postmenopausal osteoporosis. It is currently unclear whether MEDISTAR<sup>®</sup> 5 MG/100 ML causes this irregular heart rhythm but you should report it to your doctor if you experience such symptoms after you have received Medistar.  
Uncommon (may affect up to 1 in 100 people)

Swelling, redness, pain and itching to the eyes or eye sensitivity to light.

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

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.

Not known (frequency cannot be estimated from the available data)

Pain in the mouth and/or jaw, swelling or non-healing sores in 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 Medistar 5 MG/100 ML after stopping treatment.

Kidney disorders (e.g. decreased urine output) may occur. Your doctor should do a blood test to check your kidney function before each dose of Medistar. It is important for you to drink at least 2 glasses of fluid (such as water), within a few hours before receiving Medistar, as directed by your healthcare provider.

If you experience any of the above side effects, you should contact your doctor immediately.

#### MEDISTAR<sup>®</sup> 5 MG/100 ML may also cause other side effects

Common (may affect more than 1 in 10 people)

Fever

Common (may affect up to 1 in 10 people)

Headache, dizziness, sickness, vomiting, diarrhoea, pain in the muscles, pain in the bones and/or joints, pain in the back, arms or legs, flu-like symptoms (e.g. tiredness, chills, joint and muscle pain), colds, sore throat, tiredness and lack of interest, weakness, pain, feeling unwell, numbness or tingling in the hands or feet, pain at the infusion site.

In patients with Paget's disease, symptoms due to low blood calcium, such as muscle spasms, or numbness, or a tingling sensation especially in the area around the mouth have been reported. Uncommon (may affect up to 1 in 100 people)

Flu, upper respiratory tract infections, decreased red cell count, loss of appetite, sleeplessness, pain in the joints, which may include reduced alertness and awareness, feeling of dizziness or numbness, extreme tiredness, trembling, temporary loss of consciousness, eye infection or irritation or inflammation with pain and redness, spinning sensation, increased blood pressure, flushing, cough, shortness of breath, upset stomach, abdominal pain, constipation, dry mouth, heartburn, skin rash, excessive sweating, itching, skin reddening, neck pain, stiffness in muscles, bones and/or joints, joint aches, muscle spasms, shoulder pain, pain in your chest muscles and rib cage, joint inflammation, muscular weakness, abnormal kidney test results, abnormal frequent urination, swelling of hands, ankles or feet, thirst, toothache, taste disturbances.

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

Severe allergic reactions including dizziness and difficulty breathing, swelling mainly of the face and throat, decreased blood pressure, dehydration secondary to post-dose symptoms such as fever, vomiting and diarrhoea.

**Reporting of side effects**  
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. By reporting side effects, you can help provide more information on the safety of this medicine.

**5. How to store MEDISTAR<sup>®</sup> 5 MG/100 ML**  
Keep this medicine out of the sight and reach of children.  
Do not use MEDISTAR<sup>®</sup> 5 MG/100 ML after the expiry date which is stated on the carton and bottle after EXP.

For the unopened bottle store at a temperature not exceeding 30°C.  
After opening the bottle, the product should be used immediately in order to avoid microbial contamination. Do not use the product after the use-by date and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2°C - 8°C.

Allow the refrigerated solution to reach room temperature before administration.  
Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.

**6. Contents of the pack and other information**  
**What contains MEDISTAR<sup>®</sup> 5 MG/100 ML**  
The active substance is zoledronic acid. Each bottle with 100 mL of solution contains 5 mg zoledronic acid (as monohydrate).

One mL solution contains 0.05 mg zoledronic acid (as monohydrate),  
- The other ingredients are mannitol, sodium citrate, sodium hydroxide, hydrochloric acid and water for injection.

**What MEDISTAR<sup>®</sup> 5 MG/100 ML looks like and contents of the pack**  
MEDISTAR<sup>®</sup> 5 MG/100 ML comes in 100 mL plastic bottles as a ready-to-use solution for infusion. It is supplied in packs containing one bottle.

Marketing authorization number: 923384

Delivery conditions: Table A (List I)

Marketing authorisation holder and manufacturer:

Les Laboratoires Médis

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**INFORMATION FOR THE HEALTHCARE PROFESSIONAL**  
The following information is intended for healthcare professionals only (see section 3):

**How to prepare and administer Medistar**  
MEDISTAR<sup>®</sup> 5 MG/100 ML solution for infusion is ready for use.

For single use only. Any unused solution should be discarded. Only clear solution free from particles and discoloration should be used. MEDISTAR<sup>®</sup> 5 MG/100 ML must not be mixed or given intravenously with any other medicinal product and must be given through a separate vented infusion line at a constant infusion rate. The infusion time must not be less than 15 minutes. MEDISTAR<sup>®</sup> 5 MG/100 ML must not be alkalized. It is used as a ready-to-use solution. Use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2°C - 8°C.

Allow the refrigerated solution to reach room temperature before administration. Aseptic techniques must be followed during preparation of the infusion. The infusion must be conducted according to standard medical practice.

#### How to store Medistar

Keep this medicine out of the sight and reach of children.

Do not use MEDISTAR<sup>®</sup> 5 MG/100 ML after the expiry date which is stated on the carton and bottle after EXP. For the unopened bottle store at a temperature not exceeding 30°C.

After opening the bottle, the product should be used immediately in order to avoid microbial contamination. Do not use the product after the use-by date and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2°C - 8°C.

Allow the refrigerated solution to reach room temperature before administration.