PACKAGE LEAFLET: INFORMATION FOR THE USER

ZOMACTON®
4 mg, powder and solvent for solution for injection

Somatropin

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.
- 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 only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. What ZOMACTON is and what it is used for

ZOMACTON contains the active substance, somatropin also known as growth hormone. Growth hormone is produced naturally in the body. It has an important role in growth. ZOMACTON contains somatropin made in a pharmaceutical manufacturing facility.

ZOMACTON is used for the long-term treatment of:
- Children who have growth failure due to insufficient growth hormone production;
- Short stature when present as a feature of Turner's syndrome (a genetic disorder affecting females).

2.What you need to know before you use ZOMACTON

Do not use ZOMACTON
- if you are allergic to somatropin or any of the other ingredients of this medicine (listed in section 6)
- in children with closed epiphyses (this is when bone growth is completed)
- Do not use ZOMACTON and tell your doctor if you have an active tumour (cancer). Tumours must be inactive and you must have finished your anti-tumour treatment before you start your treatment with ZOMACTON.
- in premature babies or neonates due to the presence of benzyl alcohol as excipient
- in patients who are seriously ill due to complications e.g. following open heart or abdominal surgery, multiple injuries from an accident, or respiratory failure
- in children with chronic renal disease at time for renal transplantation

Warnings and precautions

Talk to your doctor or pharmacist before using ZOMACTON
- ZOMACTON may due to the presence of benzyl alcohol as excipient cause toxic reactions and allergic reactions in infants and children up to 3 years old and must not be given to premature babies and neonates.
- Patients with Prader-Willi syndrome should not be treated with ZOMACTON unless they are also suffering from growth hormone failure.
- ZOMACTON therapy should be used only under the supervision of a qualified physician experienced in the management of patients with growth deficiency.
- If you have a family history of diabetes mellitus, your blood sugar levels may be checked at intervals by your doctor. If you are a diabetic, you will require strict monitoring of blood glucose and your dose may need to be adjusted to maintain diabetic control. Your doctor will tell you if this is necessary.
- If your growth hormone deficiency results from an intracranial lesion, you will be carefully monitored for progression or recurrence of the lesion. If this is confirmed, the doctor will tell you if you need to stop treatment with ZOMACTON.
- Please consult the doctor if you develop signs or symptoms of relapse due to previous malignant disease.
- If you have a replacement therapy with glucocorticoids, you should consult your doctor regularly, as you may need adjustment of your glucocorticoid dose.
- If you develop any of the following while you are on treatment with ZOMACTON, contact your doctor or nearest casualty department at once:
  - repeated or severe headache;
  - problems with vision;
  - nausea and/or vomiting.
- Treatment with ZOMACTON may lead to a deficiency of thyroid hormone that may require replacement therapy. To check for this, your doctor will normally carry out tests to ensure that your thyroid gland is working properly.
- Some children with growth hormone deficiency have developed leukaemia (increased number of white blood cells), whether or not they have received treatment with growth hormone. However there is no evidence that leukaemia incidence is increased in growth hormone recipients without predisposing factors. No cause and effect relationship with growth hormone treatment has been proven.
- Please consult the doctor at once if you develop a limp, or hip or knee pain.
- If you are suffering of complications following post surgery, trauma or acute respiratory failure, consult your doctor.
- If you require surgery, are seriously injured in an accident or become seriously ill, your doctor may review your treatment.
- ZOMACTON may cause an inflammation of the pancreas, which causes severe pain in the abdomen and back. Contact your doctor if you or your child develops stomach ache after taking ZOMACTON.

Other medicines and ZOMACTON
Tell your doctor or pharmacist if you are using, have recently used or might use any other medicines, including medicines obtained without prescription.

Patients treated with glucocorticoids should have their dose carefully adjusted as glucocorticoids can inhibit the growth promoting effect of somatropin. If you are on treatment with steroids due to insufficient production of ACTH (adrenocorticotrophic hormone) then please tell your doctor.

Androgens, oestrogens and anabolic steroids can accelerate bone maturation and therefore diminish the final height.

Patients suffering of diabetes may have adjusted their insulin dose as somatropin can induce a state of insulin resistance.

Please tell your doctor if you are on treatment with regularly prescribed medication e.g. steroids, medication for epilepsy or medication to suppress the body's immune system.

Pregnancy and breast-feeding
There is no experience from use in pregnant woman. ZOMACTON must not be used during pregnancy. It is not known whether ZOMACTON passes over into breastmilk. ZOMACTON must not be used during breastfeeding.

Driving and using machines
ZOMACTON has no or negligible influence on the ability to drive or use machines

ZOMACTON contains benzyl alcohol
The solution contains benzyl alcohol 9 mg/ml.
Due to the presence of benzyl alcohol as excipient, ZOMACTON may cause toxic reactions and allergic reactions in infants and children up to 3 years old and must not be given to premature babies or neonates.

3. How to use ZOMACTON

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

Your doctor or nurse will normally decide with you, the most suitable method of administration and provide dosage instructions according to the method used. Your doctor or nurse will tell you the correct dose for you. The dose is administered subcutaneously (under the skin) with a syringe or with the needle device Ferring Pen.

Dosage:
Growth hormone deficiency in children:
Your doctor will calculate the precise dose for you, based on your bodyweight. Generally, a dose of 0.17 - 0.23 mg per kg bodyweight per week is recommended. This weekly amount may be divided into six or seven doses, corresponding to a daily dose of 0.02 - 0.03mg per kg bodyweight. The maximum recommended weekly dosage is 0.27 mg per kg bodyweight corresponding to daily injections of up to about 0.04mg per kg bodyweight.

Turners Syndrome (females only):
Your doctor will calculate the precise dose for you, based on your bodyweight. Generally, a dose of 0.33 mg per kg bodyweight per week is recommended. This weekly amount may be divided into six or seven doses, corresponding to a daily dose of 0.05 mg per kg bodyweight.

Instructions for reconstitution

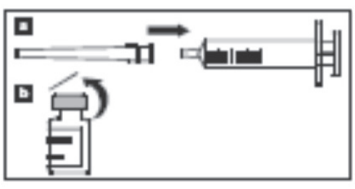
The powder should only be dissolved with the solvent provided.

Two concentrations can be prepared depending on the volume of solvent used. Your doctor will tell you which strength to use.

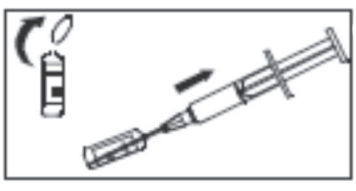
- for administration using a syringe or Ferring-Pen use 1.3 ml of solvent for a concentration of 3.3 mg/ml (taking into account the whole content of the vial which is greater than 4 mg). The reconstituted powder and solvent for solution for injection should be administered using a syringe.
- for administration using a syringe only, use 3.2 ml of solvent for a concentration of 1.3 mg/ml. (taking into account the whole content of the vial which is greater than 4 mg). The reconstituted powder and solvent for solution for injection should be administered using a syringe.

Reconstitution should be performed in accordance with good practice rules, particularly in the respect of asepsis.

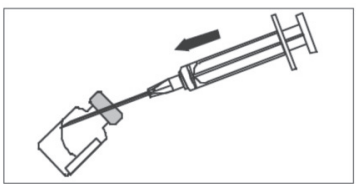
1. Hands should be washed



2 a. Fit the needle onto the graduated syringe.
b. Remove the plastic top on the vial.
c. Wipe the top of the vial with an alcohol swap. Do to touch the rubber stopper after cleaning.



3 Snap off the top of the solvent ampoule. Remove the plastic cover on the needle. Make sure that the plunger is completely pushed in before introducing the needle into the ampoule.
Slowly draw up the required volume in the syringe.



4 Place the needle into the centre of the clean rubber stopper and into the vial and inject the solvent slowly into the vial aiming the stream of liquid against the glass wall in order to avoid foam.

5 The vial must then be swirled with a gentle rotary motion until the contents are completely dissolved in order to obtain a clear and colourless solution.

Since the powder mainly contains proteins, shaking or vigorous mixing is not recommended.

If after mixing, the solution is cloudy or contains particles, the vial and its contents should be disposed of.
In case of cloudiness after refrigeration, the solution should be allowed to warm up to room temperature (25°C). If cloudiness still persists or coloration appears, dispose of the vial and its contents.

The solution should be used within 14 days after reconstitution if stored in a refrigerator.
Any unused solution in the vial should be disposed of at the end of the 14-day storage period.

Instructions for administration

The clear, colourless solution should then be administered subcutaneously as you have shown at the clinic using either a syringe or Ferring Pen.

Following reconstitution the following steps should be performed for injection

1. Hands should be washed
2. The top of the vial should be wiped with an alcohol swab to prevent contamination of the content. Do not touch the rubber stopper after cleaning.
3. Turn the vial upside down keeping the top of the needle below the surface of the medication. Gently pull back on the plunger until your prescribed amount of medication fills the syringe. If you do not have enough medication for a full dose, reconstitute a new vial to make up the difference.
4. With the needle still in the upside down vial, gently tap the syringe to loosen any air bubbles
5. Remove the needle from the vial and carefully replace the needle cap until ready to inject
6. Thoroughly clean the injection site with an alcohol swap
7. Check that the correct dose is in the syringe
8. Remove the needle cap and hold the syringe the way you hold a pencil
9. With your free hand, gently pinch the skin around the injection site between your fingers
10. Insert the needle into the tissue beneath the skin's surface at a 45° to 90° angle to reduce discomfort
11. Holding the syringe in place, pull back (if there is blood in the syringe, it means you have entered a blood vessel. Do not inject ZOMACTON. Withdraw the needle, discard all supplies, and go back to step 1. Choose and clean a new injection site). If no blood appears, slowly push the plunger until the syringe is empty
12. Quickly pull the needle straight out and apply pressure to the site of injection with a sterile gauze pad. Throw away the needle and syringe in your sharps disposable container

Do not share your syringes, needles, or vials with anyone else. You may give them an infection or get one from them.

Any unused product or waste material should be disposed of in accordance with local requirements.

The Ferring pen (a needle device) is not provided in the packaging. Specific instructions for the use of the Ferring Pen are given in a brochure supplied with the device.

If you use more ZOMACTON than you should
An overdose may cause hypoglycaemia (low blood sugar), followed by hyperglycaemia (high blood sugar).
In the event of an overdose, contact the doctor or nearest hospital casualty department at once. The effects of repeated overdosing are unknown.

If you forget to use ZOMACTON
In the event of a missed dose, do not worry. Carry on as usual and administer the next dose at your usual time.
You may experience hypoglycaemia (low blood sugar level). Although the long-term effectiveness of the treatment will not be affected, you should consult your doctor if this happens.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

The subcutaneous administration of growth hormone may lead to an increase or decrease of fat at the site of administration. It is therefore recommended to frequently change the site of administration. On rare occasions, patients develop pain and an itchy rash at the site of administration.

Very commonly reported side effects
(may affect more than 1 in 10 people)
Adults only:
- Swelling due to the build up of fluid, especially in the hands and feet (Oedema)
- Mild high blood sugar (hyperglycaemia)
- Joint pain (Arthralgia)
- Muscle pain (Myalgia)
- Headache
- Numbness, tingling, burning or creeping on the skin (Paresthesia)

Commonly reported side effects
(may affect up to 1 in 10 people):
Children and Adults:
- Hypothyroidism
- An immune reaction to the growth hormone, which may show up in a blood test (antibody building)
- Headache,
- Increased tightness of muscle tone (hypertonia),

Children only:
- Swelling due to the build up of fluid, especially in the hands and feet (Oedema, peripheral oedema,)
- Injection site reactions,
- Weakness (asthenia)
- Glucose tolerance impaired
- Joint pain (Arthralgia);
- Muscle pain (Myalgia)

Adults only:
- Stiffness in the legs and/or arms
- Difficulty falling asleep or/and difficulty staying asleep (insomnia)

Uncommon reported side effects
(may affect up to 1 in 100 people)
Children and Adults:
- Anemia
- Rapid heart rate (tacycardia)
- Feel a whirling or spinning (vertigo)
- Double vision (diplopia)
- Papilloedema
- Vomiting, abdominal pain, flatulence, nausea
- Weakness,
- Injection site atrophy, injection site haemorrhage, injection site mass, hypertrophy
- Low blood sugar (hypoglycaemia)
- Hyperphosphatemia
- Muscle atrophy
- Bone pain
- Carpal tunnel syndrome
- Neoplasm malignant, neoplasm
- Sleepiness (somnolence)
- Involuntary eye movement (nystagmus)
- Personality disorders
- Urinary incontinence, haematuria, polyuria, increased urine frequency, urine abnormality
- Injection site reactions (incl. lipodystrophy, skin atrophy, dermatitis exfoliative, urticaria, hirsutism, skin hypertrophy)

Children only:
- Stiffness in the legs and arms

Adults only:
- High blood pressure (hypertension)

Rarely reported side effects
(may affect up to 1 in 1,000 people):
Children and Adults:
- Diarrhoea
- Renal function test abnormal
- Diabetes mellitus type II
- Tingling or numbness in certain areas of the body (neuropathy),
- A build up of fluid around the brain (appears as repreated or severe headache, blurred vision and nausea and/or vomiting),

Children only:
- High blood pressure (Hypertension)
- Difficulty falling asleep or/and difficulty staying asleep (insomnia),
- Numbness, tingling, burning or creeping on the skin (paresthesia)

Very rarely reported side effects
(may affect up to 1 in 10,000 people):
Children only:
- Leukaemia (the occurrence appears to be no more common than in children in the general population)
- Abnormal breasts enlargement (Gynecomastia)

Reporting of side effects
If you get any side effects, talk to your doctor or nurse. This includes any side effects not listed in this leaflet. You can also report side effects directly via the Yellow Card Scheme, website: www.mhra.gov.uk/yellowcard. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store ZOMACTON

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

Do not use this medicine after the expiry date which is stated on the packaging. The expiry date refers to the last day of that month.

Store in a refrigerator at 2°C - 8°C; keep in the outer carton in order to protect it from light.

After reconstitution, the solution may be stored for a maximum of 14 days in a refrigerator (2°C- 8°C). Store the vial in an upright position.

Any unused solution in the vial should be disposed of at the end of 14-day storage period.
In case of cloudiness after refrigeration, the solution should be allowed to warm up to room temperature (25°C). If cloudiness still persists, or coloration appears, dispose of the vial and its contents.

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 ZOMACTON contains

The active substance is somatropin : 4 mg in a vial, corresponding to a concentration of 1.3 mg/ml or 3.3 mg/ml after reconstitution.

The other ingredients are:
Powder: Mannitol
Solvent: benzyl alcohol, sodium chloride and water for injections

ZOMACTON contains less than 1 mmol sodium (23 mg) per dose, so it is essentially "sodium-free"

What ZOMACTON looks like and contents of the pack

ZOMACTON is a powder and solvent for solution for injection.
Powder in a vial (4mg somatropin) and solvent in an ampoule (3.5ml) in two different pack types:
- Pack size of 1, 5 or 10, with a syringe and a needle.
- Pack size of 5, with a syringe, a needle and an adapter.

Not all pack sizes may be marketed.

The powder is white to off white in colour. After reconstitution, the solution is clear and colourless.

Marketing Authorisation Holder and Manufacturer

Marketing Authorisation Holder:
Ferring Pharmaceuticals Ltd,
Drayton Hall,
Church Road,
West Drayton,
UB7 7PS, UK

Zomacton 4mg Injection: PL 03194/0052
Isotonic Saline Solution 0.9%: PL 03194/0054

Manufacturer:
Ferring GmbH,
Wittland 11, D-24109 Kiel, Germany

This medicine is authorised in the Member States of the European Economic Area and in the United Kingdom (Northern Ireland) under the following names:

ZOMACTON: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom

This leaflet was last revised in June 2021.

FERRING
PHARMACEUTICALS