



BioAvenir



Isovenir Patient Information Brochure

Dear Patient,

This brochure has been given to you by your medical caregivers because you are a candidate for treatment with Isovenir.

This brochure is intended to provide you with information about treatment with Isovenir prescribed to treat severe acne sores that have not responded to other treatment.

However, your healthcare professionals are the best source of information. The information and recommendations in this brochure do not replace your doctor's professional opinion. If you have further questions, refer to your doctor or pharmacist.

For complete information about this medicine read the patient information leaflet enclosed in the medicine package. The leaflet for this medicine is also available on the Ministry of Health website:

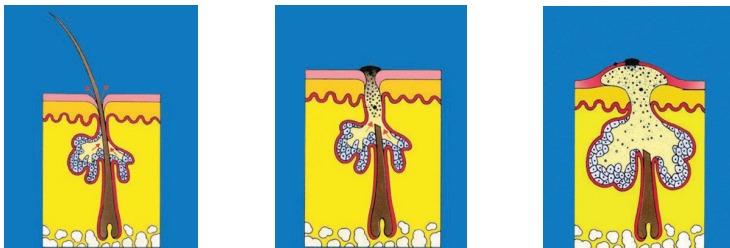
<https://data.health.gov.il/Drugs/index.html#!/byDrug>

We wish you a successful treatment!

Information about severe acne

Severe acne is a disease that disfigures the skin. Although acne is usually viewed as a condition of adolescence, acne can continue to a later age, up to the 30s and 40s. Men tend to suffer more from severe acne.

Acne develops in the oil (sebaceous) glands that produce skin oils. These glands can be of different sizes and structure. There is at least one gland in each hair follicle.



These glands secrete an oily substance called sebum, which normally passes through the hair follicle to the skin.

During adolescence these glands grow even further and secrete more than the normal amount of sebum, particularly in the area of the face, chest, and back. Acne develops when the normal passage of sebum to the skin is blocked. In severe acne, the large amount of sebum that builds up in the glands tears the hair follicle wall and starts an inflammatory process under the skin (nodule).

These nodules tend to leave scars. There are factors that may make acne worse, such as mental stress, cosmetic products, and some medicines (such as those containing iodide or bromide).

	Isovenir 5 mg Soft gelatin capsules	Isovenir 10 mg Soft gelatin capsules	Isovenir 20 mg Soft gelatin capsules	Isovenir 40 mg Soft gelatin capsules
Composition:	Each capsule contains: isotretinoin 5 mg	Each capsule contains: isotretinoin 10 mg	Each capsule contains: isotretinoin 20 mg	Each capsule contains: isotretinoin 40 mg

This medicine has been prescribed to treat your illness. Do not pass it on to others. It may harm them, even if it seems to you that their medical condition is similar to yours. Treatment with Isovenir must be supervised by a dermatologist.

Special warnings for women/teenage girls:

Isovenir is a medicine that is highly likely to harm an unborn baby (in medical language: the medicine is teratogenic).

In addition, it increases the risk of miscarriage. This may happen even if Isovenir is taken only for a short time during pregnancy. Therefore:

1. You must not take Isovenir if you are pregnant or think you are pregnant.

- 2. You must not take Isovenir while breastfeeding. There is a high probability that the medicine will pass into your breast milk and it may harm your baby.**
- 3. You must not take Isovenir if you could get pregnant during treatment.**
- 4. You must not get pregnant for one month after stopping this treatment because some medicine is still left in your body.**
- 5. You must use contraceptives during the course of treatment and for one month after completing treatment.**

Due to the risk of birth defects (damage to the unborn baby), Isovenir is given to women of child-bearing age on condition that they comply with the following precautionary measures:

1. Begin treatment with Isovenir **only in case of severe acne**, after other treatments (such as ointments and creams or antibiotics) have failed.
2. Before treatment, your doctor must confirm **that you are not pregnant**. In addition, your doctor must explain all the risks of **birth defects** during the course of treatment. You must understand that **you must not become pregnant during the course of treatment** and what you must do to prevent getting pregnant.
3. Your doctor must provide you with **information about the contraceptives** that you must use to prevent pregnancy. Your doctor must refer you to a specialist who will advise on a contraceptive method that is suitable for you.
4. You must continuously use **at least one effective method of contraception** (for example, an intra-uterine device or contraceptive implant) or two effective contraceptives that work in different ways (for example, a contraceptive pill and a condom) for one month before starting treatment, during treatment, and for one month after stopping treatment. Before starting treatment with Isovenir, your doctor will ask you to take a pregnancy test, which must be negative for you to start taking the medicine.
5. **You must use contraception even if you are not menstruating** or are not sexually active (unless the doctor decides this is not necessary).
6. **You must be capable of complying with the necessary pregnancy prevention measures as listed in the patient leaflet and in this brochure.**
7. **You must agree to come to the doctor for monthly follow up visits** and to take additional pregnancy tests, as decided by your doctor. You may be asked to take a pregnancy test one month after stopping treatment with Isovenir. You must not get pregnant during treatment with Isovenir and for one month after completing the treatment because there is still some medicine left in your body.
8. Your doctor will discuss all these points with you, using a checklist. This is a way for your doctor to confirm that you have been told about all the risks and that you will follow the rules described above.

If despite all precautions, you nevertheless become pregnant during treatment with Isovenir, or during the month after treatment has stopped, stop taking the medicine straight away, and consult your doctor. Your doctor may refer you to another specialist for consultation. Prescriptions for women who could get pregnant are limited to 30 days of treatment. A new prescription is necessary to continue treatment. **Each prescription will be valid for 7 days from date of issue.**

Special warnings for men:

Isovenir does not appear to damage sperm. Very low levels of isotretinoin (the medicine's active ingredient) can be found in the semen of men taking Isovenir, but these levels are too low to harm your partner's unborn baby. You must remember not to share your medicine with anyone else, particularly not with women.

X Do not use the medicine if:

- you are sensitive (allergic) to the active ingredient isotretinoin, or to peanuts or soya or any of the other ingredients that this medicine contains. For a list of inactive ingredients,
- see section 6: "Additional information" in the patient information leaflet enclosed in the medicine package.
- you are pregnant or think you may be pregnant.
- you are breastfeeding.
- you are able to become pregnant, but cannot or are not willing to follow the guidelines for

preventing pregnancy that appear in the section "Special warnings for women/teenage girls".

- you suffer from a liver disease.
- you have very high levels of blood fats (e.g., high level of cholesterol or triglycerides).
- you have very high levels of vitamin A in your body (hypervitaminosis A).
- you are being treated with a tetracycline antibiotic during treatment with Isovenir (see the section "Isovenir and other medicines").
- do not use Isovenir in children under the age of 12.

Use of Isovenir in children over the age of 12 is only allowed after reaching puberty.

If any of the aforementioned situations apply to you, consult a doctor before taking Isovenir.

Warnings for all patients:

- You must tell your doctor if you suffer, or have suffered in the past, from any mental illness (including depression, tendency to aggressiveness, suicidal behavior, changes in mood or psychosis), or if you are taking any medicines to treat any of these conditions. You may not notice any changes in your mood and behavior, so it is very important that you inform your friends and family that you are taking this medicine.
- **Severe skin reactions** such as erythema multiforme, Stevens-Johnson syndrome, and toxic epidermal necrolysis have been reported with Isovenir use. The rash may develop into widespread blisters or skin peeling. You should also pay attention to ulcers in the mouth, throat, nose, genitals, and conjunctivitis (red and swollen eyes).
- **In rare cases, Isovenir may cause severe allergic reactions** some of which can affect the skin in the form of eczema, hives and bruises or red patches on the arms and legs. If you develop an allergic reaction, stop taking Isovenir, refer to a doctor urgently and tell him or her that you are taking this medicine.
- **Cut down on intensive exercise and physical activity.** Isovenir may cause muscle and joint pain, particularly in children and teenagers engaging in vigorous physical activity.
- **Isovenir has been associated with inflammatory bowel disease.** The doctor will stop Isovenir treatment if you have severe bloody diarrhea without any history of gastrointestinal disorders.
- **Isovenir may cause dry eyes, intolerance to contact lenses and vision difficulties including decreased night vision.** Inform the doctor if you have any of these symptoms. The doctor may ask you to use lubricating eye ointment or artificial tears. If you use contact lenses and you have developed intolerance to contact lenses, you may need to wear glasses during treatment. The doctor may refer you to a specialist for advice if you have vision difficulties, and you may need to stop taking Isovenir.
- **Benign intracranial hypertension has been reported with Isovenir treatment** in some cases where the medicine Isovenir was taken together with tetracyclines (a type of antibiotic). Stop taking Isovenir and refer to a doctor urgently if you have symptoms such as: headache, nausea, vomiting, and vision disturbances. The doctor may refer you to a specialist to check for swelling of the optic disk in the eye (papilledema).
- **Isovenir may cause an increase in liver enzyme levels.** Your doctor will perform blood tests before, during and after Isovenir treatment to measure these levels. If your liver enzyme levels remain high, the doctor may lower the Isovenir dosage or decide to stop Isovenir treatment.
- **Isovenir may frequently increase blood fat levels,** such as cholesterol or triglycerides. Your doctor will perform blood tests to measure these levels in your blood before, during and after Isovenir treatment. It is recommended not to drink alcoholic drinks, or, at least, to reduce the amount of alcoholic drinks you usually consume - for as long as you are being treated with Isovenir. Inform your doctor if you are suffering from high blood fat levels, from diabetes (high blood sugar levels), are overweight, or if you suffer from alcohol dependence. You may need to perform blood tests more often. If your blood fat levels remain high, the doctor may lower your Isovenir dose, or decide to stop the treatment.

- **Inform the doctor if you have a kidney problem.** The doctor may start the treatment with a low dosage of Isovenir and then increase it to the maximum dosage you can tolerate.
- **Tell your doctor if you have a fructose intolerance.** The doctor will not prescribe you with Isovenir if you have a fructose, or sorbitol intolerance.
- **Isovenir may cause an increase in your blood sugar levels.** In rare cases, patients become diabetic. Your doctor may monitor your blood sugar levels during treatment, particularly if you already have diabetes, are overweight, or if you suffer from alcohol dependence.
- **Isovenir can apparently cause dryness of the skin and lips.** It is recommended to use a skin moisturizing ointment or cream, and a lip balm during treatment. To prevent skin irritation, avoid using skin cleansers that peel the skin or anti-acne preparations.
- **Avoid extensive sun exposure and use of sun-lamps and sun-beds.** Your skin may be more sensitive to sunlight. Before you go out in the sun, use a sun protection product with a high protection factor (SPF 15 or higher), a hat, and long clothes.
- **Do not undergo any cosmetic skin treatments.** Isovenir may make your skin more fragile: Do not remove hair by waxing, do not mechanically peel the skin (dermabrasion) and do not perform laser treatments during the course of treatment with Isovenir, and for at least 6 months after completing the treatment. These treatments could cause scarring, skin irritation, or in rare cases, changes in the color of the skin.
- **You must remember not to share this medicine with anyone else.** Return unused capsules at the end of the treatment. Consult the doctor or pharmacist regarding where to return the capsules.
- **Do not donate blood** during Isovenir treatment and for 30 days after completing the treatment. If a woman who is pregnant receives your blood, the baby may be born with birth defects.

Isovenir and other medicines

- If you are taking or have recently taken other medicines, including nonprescription medications and nutritional supplements, tell your doctor or pharmacist.
- Do not take vitamin A supplements or tetracyclines (a type of antibiotic), and do not use skin treatments for acne during treatment with Isovenir. Moisturizers or skin emollients (creams or skin preparations that prevent water loss from the skin and have a skin softening effect) can be used.
- During treatment with Isovenir, avoid using anti-acne preparations that cause skin peeling.

Pregnancy and breastfeeding

If you are pregnant or breastfeeding, think you may be pregnant or are planning to become pregnant, ask your doctor for advice before taking this medicine.

Pregnancy: Do not use Isovenir during pregnancy. If you are able to get pregnant, you must use effective contraceptive methods for one month before starting treatment, during treatment, and for one month after completing treatment with Isovenir.

If you do get pregnant during the course of treatment with Isovenir, or during the month after completing the treatment, **stop taking the medicine straight away,** and refer to a doctor. The doctor may refer you to a specialist for consultation.

If you used Isovenir during pregnancy, it may cause damage to the unborn baby (in medical language: the preparation is teratogenic).

It also increases the risk of miscarriage.

Isovenir can cause serious abnormalities of brain, face, ear, eye, heart and certain glands (called the thymus gland and parathyroid gland) of the unborn baby.

Breastfeeding: **Do not use Isovenir if you are breastfeeding.** There is a high probability that the medicine will pass into your breast milk and may harm your baby.

Driving and using machines

During treatment with this medicine, your night vision may be disturbed. This effect may happen suddenly, and in rare cases this effect also continues after stopping the treatment. Drowsiness and dizziness during treatment have been reported very rarely. If you experience these effects, do not drive or operate machinery.

How to use this medicine?

Always use according to the doctor's instructions. Check with your doctor or pharmacist if you are not sure.

Only your doctor will determine your dose and how you should take the medicine. Do not exceed the recommended dose.

Do not chew! Swallow the capsules whole, on a full stomach, with some fluids or a small amount of food. The capsules can be taken once or twice a day.

Duration of treatment

Treatment with Isovenir usually lasts 16 to 24 weeks. Most patients need only one course of treatment. Your acne may continue to improve for up to 8 weeks after completing the treatment with Isovenir, and therefore, an additional course of treatment is not usually started until 8 weeks have passed since completion of treatment.

Sometimes the acne gets worse during the first weeks of treatment. The condition usually improves as treatment progresses. Persist with the treatment as recommended by the doctor. Even if your health improves, do not stop taking this medicine without consulting your doctor.

Side effects

As with any medicine, using Isovenir may cause side effects in some users. Do not be alarmed by this list of side effects. You may not experience any of them. The side effects usually wear off gradually or stop after completing the treatment. Other side effects can be serious and you will have to refer to the doctor immediately.

Side effects requiring immediate medical attention:

Skin problems

Side effects occurring at unknown frequency (frequency cannot be determined from available data):

Serious skin rashes (erythema multiforme, Stevens-Johnson syndrome, and toxic epidermal necrolysis) that may be life-threatening and therefore require immediate medical treatment. They appear initially as circular patches, often with blisters in their center, usually on the arms and hands, or legs and feet; more severe rashes may also include blistering of the chest and back. Additional symptoms that may appear include eye infection (conjunctivitis) or ulcers in the mouth, throat or nose. Severe forms of rashes may progress to widespread peeling of the skin which may be life-threatening. These serious rashes are often preceded by headaches, fever and body aches (flu-like symptoms).

If you develop a severe rash or the skin symptoms described above, stop taking Isovenir and consult your doctor immediately.

Mental problems

Rare side effects (appear in 1-10 users out of 10,000):

- Depression or related disorders. Signs of this include a feeling of emptiness or sadness, mood changes, anxiety or emotional discomfort, crying spells, irritability, loss of ability to enjoy or show interest in social or sport activities, sleeping too much or too little, changes in weight or appetite, reduced performance at school or at work, trouble concentrating.
- Existing depression getting worse.
- Becoming violent or aggressive.

Very rare side effects (appear in less than one user out of 10,000):

- Some patients developed thoughts about hurting themselves or ending their own lives (suicidal thoughts), have tried to end their own lives (attempted suicide), or have ended their lives (committed suicide). These patients may not appear to be depressed.
- Unusual behavior.
- Signs of psychosis: loss of touch with reality, such as hearing voices or seeing things that do not exist.

If you experience signs of any of the above-mentioned mental effects, refer to your doctor immediately.

Your doctor may instruct you to stop taking Isovenir. It is possible that stopping treatment with Isovenir will not lead to the disappearance of the effects. You may need additional help and your doctor can help you with this.

Allergic reactions

Rare side effects (appear in 1-10 users out of 10,000):

Serious reactions (anaphylactic): difficulty breathing or swallowing, caused by sudden swelling of the throat, face, lips and mouth. Also, sudden swelling of the hands, legs and ankles.

Very rare side effects (appear in less than one user out of 10,000):

- Sudden tightness in the chest, shortness of breath and wheezing, particularly if you have asthma.

If you develop a serious reaction, seek emergency medical help immediately.

If you develop any allergic reaction, stop taking Isovenir and refer to your doctor.

Bones and muscles

Side effects occurring at unknown frequency (frequency cannot be determined from available data):

Muscle weakness which can be life-threatening, may be associated with difficulty moving arms or legs, painful, swollen, bruised areas of the body, dark-colored urine, reduced or no urine output, confusion or dehydration. These are signs of rhabdomyolysis, a breakdown of muscle tissue which can lead to kidney failure. This may occur if you are doing intensive physical activity during the course of treatment with Isovenir.

Liver and kidney problems

Very rare side effects (appear in less than one user out of 10,000):

- Yellow skin or eyes and a feeling of tiredness - these can be signs of jaundice (hepatitis, inflammation of the liver). **Stop taking Isovenir straight away and refer to a doctor.**
- Difficulty passing urine, swelling of the eyelids, feeling excessively tired - these can be signs of kidney inflammation. **Stop taking Isovenir straight away and refer to a doctor.**

Nervous system problems

Very rare side effects (appear in less than one user out of 10,000):

- Lasting headache, accompanied by nausea, vomiting and changes in vision, including blurred vision - these can be signs of benign intracranial hypertension, especially if Isovenir is taken with antibiotics from the tetracycline family. **Stop taking Isovenir straight away and refer to a doctor.**

Gut and stomach problems

Very rare side effects (appear in less than one user out of 10,000):

- Severe abdominal pain, with or without severe bloody diarrhea, nausea and vomiting - these can be signs of serious problems in your gut. **Stop taking Isovenir straight away and refer to a doctor.**

Eye problems

Very rare side effects (appear in less than one user out of 10,000):

- Blurred vision. **If you develop blurred vision, stop taking Isovenir straight away and refer to a doctor.**

If your sight is affected in any way, refer to the doctor as soon as possible.

Additional side effects

Very common side effects (appear in more than one user out of ten):

- Dryness of the skin, especially in the area of the lips and face; skin inflammations; chapped and inflamed lips; rash; itching and slight skin peeling. Use a moisturizing preparation when you start treatment.
- Skin more fragile and redder than usual, especially in the face area.
- Back pain, muscle pain, joint pain, particularly in children and teenagers.

To avoid worsening of bone and muscle problems, cut down on intensive physical activity during the course of treatment with Isovenir.

- Inflammation of the eyes (conjunctivitis) and eyelid area; dry and irritated eyes. Consult the pharmacist regarding suitable eye drops. If you suffer from dry eyes and wear contact lenses, you may need to wear glasses instead of contact lenses.
- High liver enzyme levels in blood tests.
- Changes in levels of fats in the blood (including HDL or triglycerides).
- Bruising, bleeding or blood clots occurring more readily (in cases in which there is an effect on the blood clotting cells).
- Anemia – weakness, dizziness, pale skin (in cases in which there is an effect on the red blood cells).

There are additional side effects which may occur with Isovenir, and that are not listed above. A full description of side effects and their frequencies is available in the patient information leaflet for this medicine.

If you experience any side effect, if any side effect gets worse, or if you experience a side effect not mentioned in the patient information leaflet, consult your doctor.

Reporting side effects

You can report side effects to the Ministry of Health by clicking on the link: "Reporting side effects due to medical treatment" that is found on the homepage of the Ministry of Health website (www.health.gov.il) which refers to the online form for reporting side effects.

You can also use this link:

<https://sideeffects.health.gov.il>

Side effects can also be reported directly to BioAvenir by email at drug.safety@bioavenir.com or by phone: **09-9544129**.

Storage conditions

To prevent poisoning, keep in a closed place out of reach and sight of children and/or infants.

Do not use the medicine after the expiry date (exp. date) that appears on the package.

The expiry date refers to the last day of that month.

Store in the original package, in a dry place below 25°C. Store capsules in the blister tray, in the outer carton, to protect from light and moisture.

This information brochure was approved according to the guidelines of the Ministry of Health on March-2024.