Bisoprolol belongs to a group of medicines called beta-blockers. It slows the heart rate, which allows a better functioning of the heart and makes it easier to pump blood through the body.

Bisoprolol is used for

- the treatment of high blood pressure (hypertension)
- treatment of chest pain that occurs when the arteries, that supply the heart muscle with blood rich in oxygen, are narrowed (angina pectoris)
- treatment of chronic stable relaxation of the heart muscle (heart failure), usually in combination with other medicines.

Do not use this medicine

- If you are allergic (hypersensitive) to bisoprolol
- If the performances or worsen heart failure and needed hospital treatment
- If you have a disturbance of cardiac conduction (or heart block), unless you have embedded pacemaker
- If you have serious problems with an irregular heart rhythm
- If you have a slow heart rate (less than 60 beats per minute)
- If you have very low blood pressure
- If you suffer from severe asthma or other chronic lung disease
- If you suffer from very poor circulation in hands and feet
- If you suffer from Raynaud's syndrome (a condition that causes loss of sensation, change
the color of the fingers and toes when they are exposed to cold

- If you have pheochromocytoma (tumor of the adrenal gland which causes high blood pressure) which is controlled by medication
- If you have too much acid in the blood (metabolic acidosis)
- If you are currently taking medication floctafenine (for the treatment of rheumatic pain with inflammation of the joints) or sultopride (for treating severe psychiatric disorders).

**Be careful with Bisoprolol**

Before taking the medicine, tell your doctor:

- If you have diabetes. Bisoprolol may mask the usual symptoms of low blood sugar levels.
- If you are on a strict diet.
- If you go through the treatment of allergic desensitization. Bisoprolol may exacerbate or aggravate allergy treatment.
- If you have other heart problems.
- If at Prinzmetal angina (spasm of coronary blood vessels, which occurs in idle).
- If you have poor circulation in the hands or feet.
- If you have problems with your liver or kidneys.
- If you have a thyroid problem. Bisoprolol may mask the symptoms of an overactive thyroid.
- If you have or have had psoriasis (a skin disease that is manifested by peeling and dry rash).
- If you are being treated for pheochromocytoma (an adrenal tumor).
- If you have asthma or other chronic lung disease.
- If you wear contact lenses because bisoprolol can cause dry eye stronger.
- If you need to receive an anesthetic before surgery, tell the hospital doctor that you are taking Bisoprolol.

**Use with other medicines (Interactions)**

Please tell your doctor or pharmacist if you are taking or have recently taken any other medicines, including those obtained without a prescription. Some medications can not be taken together, and some will need to change the dose. It is particularly important to tell your doctor if you are taking the following medications:

- Medications for treating irregular heart rhythm (e.g., quinidine, disopyramide, lidocaine, phenytoin, flecainide, propafenone, or amiodarone).
- Other medicines for the treatment of high blood pressure (hypertension), for example:
  - amlodipine, lacidipine, verapamil, diltiazem, doxazosin, reserpine, indoramin, clonidine, methyldopa, moxonidine, rilmenidine.
- Medicines for the treatment of heart failure (e.g. digoxin).
- Medicines for the treatment of depression or other psychiatric disease, e.g. fluoxetine, tricyclic antidepressants, barbiturates, phenothiazines or MAO inhibitors.
- Medicines to lower blood sugar, such as oral antidiabetic agents or insulin.
- Some painkillers such as NSAIDs (eg acetylsalicylic acid, ibuprofen or diclofenac).
- Corticosteroids used for the suppression of inflammatory or allergic reaction, for example:
  - prednisolone
- Medicines to treat asthma
- Medicines for the treatment of allergic rhinitis.
- Medicines for the treatment of malaria (e.g., mefloquine).
- Medicines for treatment of certain ophthalmic diseases (glaucoma) and those which extend the pupil.
Some medicines for the clinical treatment of shock (e.g., epinephrine, norepinephrine, dobutamine).
Medicines for migraine treatment (for example, ergotamine).

**Pregnancy and breast-feeding**

Ask your doctor or pharmacist for advice before taking any medicine. If you are pregnant or breast-feeding, do not take this medicine before you talk to your doctor. If you become pregnant while being treated with this medicine, contact your doctor immediately.

**Driving and using machines**

If during the treatment occurs: tiredness, drowsiness or dizziness, you should not drive or use machine. Pay attention to the adverse effects, especially at the beginning of treatment, at change the dose, or if you consume alcohol.

**How to take Bisoprolol (Dosage and administration)**

Always take Bisoprolol exactly as your doctor has told you. If you are not sure, check with your doctor or pharmacist. Tablets should be taken in the morning, regardless of the meal. Swallow the tablets whole with a glass of water. Do not chew or crush them.

**High blood pressure**

Adults: The doctor will adjust the dose for each patient. The usual starting dose is 5 mg once a day. The dose may be increased to 10 mg per day, which is the usual maintenance dose. The high recommended dosage is 20 mg per day.

**Angina pectoris**

Adults: The doctor will adjust the dose for each patient. The usual starting dose is 5 mg once a day. The dose may be increased to 10 mg per day, which is the usual maintenance dose. The high recommended dosage is 20 mg per day.

**Heart failure**

Before starting treatment with bisoprolol you have to take any other medicines for treatment of heart failure such as ACE-inhibitors (enalapril, captopril) or a diuretic. For the treatment of heart failure, it is recommended to hospital specialist start the application of the bisoprolol and later implemented control. Adults Starting with a low dose of 1.25 mg per day, the physician will gradually increase the volume pills you are taking, until the reach the dosage that suits you best. Doing so, he will often control the heart rate and blood pressure. It is important to follow your doctor's instructions exactly. If you are not sure, ask your doctor or pharmacist. Sometimes heart failure may worsen while taking Bisoprolol, especially at the beginning of the treatment. This may lead to increased symptoms (e.g., fatigue, shortness of breath), falling blood pressure and heart rate slowed. You must tell your doctor if symptoms are worsen or condition as may be required change the dose of bisoprolol or other medications you are taking.
Patients with liver and kidney problems

Depending on your condition, your doctor may need to adjust the above recommended doses. Children and adolescents (under 18 years) Bisoprolol are not recommended.

Overdose

If you accidentally take too many tablets (overdose), you may feel dizzy, faint, shortness of breath/wheezing in the lungs or fatigue. There may be a slower and weaker heart rate falls blood pressure and decrease blood sugar levels (you will sweat, feel the hunger and palpitations). Immediately contact your doctor or the nearest hospital emergency department. Take a box of medicine with you.

If you forget to take Bisoprolol

If you forget to take a dose, do not worry. Take a second as soon as you remember and then continue take the medicine according to the usual schedule. Do not take a double dose to make compensate for the missed.

If you stop to take Bisoprolol

Do not suddenly discontinue taking Bisoprolol before you discuss this with your doctor. If you suddenly stop taking the tablets, there may be side effects. Your doctor will advise you how to reduce your dose and then stop taking this medication. If you have any further questions on the use of bisoprolol, contact your doctor or pharmacist.

Side effects

If occurs any of this side effects, tell your doctor immediately or go to the emergency room office nearest hospital:

- The emergence or worsening of heart failure, with symptoms such as shortness of breath or swelling leg. These adverse reactions often occur in patients with heart failure, and less frequently in patients with hypertension or angina pectoris.
- Worsening symptoms of circulatory disorders of the legs, such as cold feet, loss of sensation and discoloration of fingers. Not known incidence of these side effects.

Very common side effects (occurring in more than 1 of the 10 patients)

- Slow heart rate

Common adverse reactions (occurring within 10 to 1 in 100 patients)

- Fatigue
- General weakness
- Dizziness
- Headache
- Feeling of coldness or numbness in the extremities (hands, feet, ears, nose), more frequent
- Cramps in the legs when walking
- Low blood pressure
- Nausea, vomiting
- Diarrhea
- Constipation

**Less frequent adverse reactions (occurring within 1 to 10 per 1000 patients)**

- Dizziness (especially when standing up from a sitting or lying position)
- Sleep problems
- Depression
- Irregular heart rhythm
- Breathing problems in patients with asthma or chronic lung disease
- Weakness or muscle cramps

**Rare side effects (occurring in 1 to 10 to 10,000)**

- Elevated levels of blood fats (triglycerides) and liver enzymes
- Nightmares
- Hallucinations
- Hearing disability
- Inflammation of the lining of the nose that causes itching and runny nose
- Allergic reactions (itching, redness, rash)
- Dry eye due to the decreased tearing, which can cause problems for people who wear contact lenses
- Inflammation of the liver (hepatitis)
- Problems with potency
- Fainting

**Very rare side effects (affects less than 1 in 10,000 patients)**

- Worsening of psoriasis
- Hair loss
- Itching or redness of the eyes (conjunctivitis)

These symptoms occur particularly at the start of treatment, and often are pulled for 1-2 weeks. This side effects occur less frequently in patients who are being treated for hypertension or angina. If you notice any side effects, please tell your doctor or pharmacist.