

Ramipril 2.5mg/5ml Oral Solution

Ramipril

Read all of this leaflet carefully before you start taking 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 Ramipril Oral Solution is and what it is used for
2. What you need to know before you take Ramipril Oral Solution
3. How to take Ramipril Oral Solution
4. Possible side effects
5. How to store Ramipril Oral Solution
6. Contents of the pack and other information

1. What Ramipril Oral Solution is and what it is used for

The name of your medicine is Ramipril 2.5mg/5ml Oral Solution (called Ramipril in this leaflet). Ramipril belongs to a group of medicines called ACE inhibitors (Angiotensin Converting Enzyme inhibitors).

Ramipril works by:

- Decreasing your body's production of substances that could raise your blood pressure
- Making your blood vessels relax and widen
- Making it easier for your heart to pump blood around your body.

Ramipril can be used:

- To treat high blood pressure (hypertension)
- To reduce the risk of you having a heart attack or stroke
- To reduce the risk or delay the worsening of kidney problems (whether or not you have diabetes)
- To treat your heart when it cannot pump enough blood to the rest of your body (heart failure)
- As treatment following heart attack (myocardial infarction) complicated with heart failure.

2. What you need to know before you take Ramipril Oral Solution

Do not take Ramipril Oral Solution:

- If you are allergic (hypersensitive) to ramipril, any other ACE inhibitor medicine or any of the other ingredients of Ramipril listed in section 6. Signs of an allergic reaction may include: a rash, swallowing or breathing problems, swelling of your lips, face, throat or tongue
- If you have ever had a serious allergic reaction called "angioedema." The signs include itching, hives (urticaria), red marks on the hands, feet and throat, swelling of the throat and tongue, swelling around the eyes and lips, difficulty breathing and swallowing
- If you have taken or are currently taking sacubitril/valsartan, a medicine used to treat a type of long-term (chronic) heart failure in adults
- If you are having dialysis or any other type of blood filtration. Depending on the machine that is used, Ramipril may not be suitable for you
- If you have kidney problems where the blood supply to your kidneys is reduced (renal artery stenosis)
- During the last 6 months of pregnancy (see section below on "Pregnancy and breast-feeding")
- If your blood pressure is abnormally low or unstable. Your doctor will need to make this assessment
- If you have diabetes or impaired kidney function and you are treated with a blood pressure lowering medicine containing aliskiren.

Do not take Ramipril if any of the above apply to you. If you are not sure, talk to your doctor before taking Ramipril.

Warnings and precautions

Talk to your doctor or pharmacist before taking Ramipril Oral Solution:

- If you have heart, liver or kidney problems
- If you have lost a lot of body salts or fluids (through being sick (vomiting), having diarrhoea, sweating more than usual, being on a low salt diet, taking diuretics (water tablets) for a long time or having had dialysis)
- If you are going to have treatment to reduce your allergy to bee or wasp stings (desensitization)
- If you are going to receive an anaesthetic. This may be given for an operation or any dental work. You may need to stop your Ramipril treatment one day beforehand; ask your doctor for advice
- If you have high amounts of potassium in your blood (shown in blood test results)
- If you are taking medicines or have conditions which may decrease sodium levels in your blood. Your doctor may carry out regular blood tests, particularly for checking the levels of sodium in your blood especially if you are elderly
- If you are taking medicines that may increase the risk of angioedema, a serious allergic reaction, such as mTOR inhibitors (e.g. temsirolimus, everolimus, sirolimus) vildagliptin, neprilysin (NEP) inhibitors (such as rasecadotril) or sacubitril/valsartan. For sacubitril/valsartan, see section 2 " Do not take Ramipril Oral Solution"
- If you have a collagen vascular disease such as scleroderma or systemic lupus erythematosus
- You must tell your doctor if you think that you are (or might become) pregnant. Ramipril is not recommended in the first 3 months of pregnancy and may cause serious harm to your baby after 3 months of pregnancy (see section below on "Pregnancy and breast-feeding")
- If you are taking any of the following medicines used to treat high blood pressure:
 - an angiotensin II receptor blocker (ARBs) (also known as sartans - for example valsartan, telmisartan, irbesartan), in particular if you have diabetes - related kidney problems
 - aliskiren.

Your doctor may check your kidney function, blood pressure, and the amount of electrolytes (e.g. potassium) in your blood at regular intervals.

See also information under the heading "Do not take Ramipril Oral Solution".

Children and adolescents

Ramipril is not recommended for use in children and adolescents below 18 years of age because safety and efficacy of Ramipril in children has not yet been established.

If any of the above apply to you (or you are not sure), talk to your doctor before taking Ramipril.

Other medicines and Ramipril Oral Solution

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines obtained without a prescription (including herbal medicines). This is because Ramipril can affect the way some other medicines work. Also some medicines can affect the way Ramipril works.

Please tell your doctor if you are taking any of the following medicines. They can make Ramipril work less well:

- Medicines used to relieve pain and inflammation (e.g. Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) such as ibuprofen or indomethacin and aspirin)
- Medicines used for the treatment of low blood pressure, shock, cardiac failure, asthma or allergies such as ephedrine, noradrenaline or adrenaline. Your doctor will need to check your blood pressure.

Please tell your doctor if you are taking any of the following medicines. They can increase the chance of getting side effects if you take them with Ramipril:

- Sacubitril/valsartan - used for treating a type of long term (chronic) heart failure in adults (see section 2 'Do not take Ramipril Oral Solution')
- Medicines used to relieve pain and inflammation (e.g. Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) such as ibuprofen or indomethacin and aspirin)
- Medicines for cancer (chemotherapy)
- Medicines to stop the rejection of organs after a transplant such as ciclosporin
- Diuretics (water tablets) such as furosemide
- Medicines which can increase the amount of potassium in your blood such as spironolactone, triamterene, amiloride, potassium salts, trimethoprim alone or in combination with sulfamethoxazole (for infections) and heparin (for thinning blood)
- Steroid medicines for inflammation such as prednisolone
- Allopurinol (used to lower the uric acid in your blood)
- Procainamide (for heart rhythm problems)
- Temsirolimus (for cancer)
- Sirolimus, everolimus (for prevention of graft rejection)
- Vildagliptin (used for treating type 2 diabetes)
- Racecadotril (used against diarrhoea).

Please tell your doctor if you are taking any of the following medicines. They may be affected by Ramipril:

- Medicines for diabetes such as oral glucose lowering medicines and insulin. Ramipril may lower your blood sugar amounts. Check your blood sugar amounts closely while taking Ramipril
- Lithium (for mental health problems). Ramipril may increase the amount of lithium in your blood. Your lithium amount will need to be closely checked by your doctor.

Your doctor may need to change your dose and/or to take other precautions:

- If you are taking an angiotensin II receptor blocker (ARB) or aliskiren (see also information under the headings "Do not take Ramipril Oral Solution" and "Warnings and precautions").

If any of the above apply to you (or you are not sure), talk to your doctor before taking Ramipril.

Ramipril Oral Solution with food and alcohol

- Drinking alcohol with Ramipril may make you feel dizzy or light-headed. If you are concerned about how much you can drink while you are taking Ramipril, discuss this with your doctor as medicines used to reduce blood pressure and alcohol can have additive effects.
- Ramipril may be taken with or without food.

Pregnancy and breast-feeding

Pregnancy

You must tell your doctor if you think that you are (or might become) pregnant.

You should not take Ramipril in the first 12 weeks of pregnancy, and you must not take them at all after the 13th week as their use during pregnancy may possibly be harmful to the baby.

If you become pregnant while on Ramipril, tell your doctor immediately. A switch to a suitable alternative treatment should be carried out in advance of a planned pregnancy.

Breast-feeding

You should not take Ramipril if you are breast-feeding.

Ask your doctor or pharmacist for advice before taking any medicine.

Driving and using machines

You may feel dizzy while taking Ramipril. This is more likely to happen when you start taking Ramipril or start taking a higher dose. If this happens, do not drive or use any tools or machines.

Ramipril Oral Solution contains ethyl and butyl parahydroxybenzoates, sodium and propylene glycol:

- ethyl and butyl parahydroxybenzoates. These may cause an allergic reaction. This allergy may happen some time after starting the medicine
- sodium. This medicine contains less than 1mmol sodium (23mg) per ml, that is to say essentially 'sodium-free'
- propylene glycol. This medicine contains 50mg propylene glycol in each ml. If you are pregnant or breast-feeding or if you suffer from a liver or kidney disease, do not take this medicine unless recommended by your doctor. Your doctor may carry out extra checks while you are taking this medicine.

3. How to take Ramipril Oral Solution

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

Taking this medicine

- This medicine contains 2.5 milligram (2.5mg) of Ramipril in each 5 millilitre (5ml) of solution.
- Take this medicine at the same time of the day each day.
- Take this medicine by mouth.
- This medicine can also be administered via nasogastric (NG) or percutaneous endoscopic gastrostomy (PEG) tubes.
- Do not use with a tube which is made of latex.

- Instructions for use via NG or PEG tube:
 1. ensure the tube is clear before taking the medicine
 2. flush the tube with 5ml of water
 3. administer the medicine into the tube, with a suitable measuring device
 4. flush the tube again with 5ml of water.

How much to take

Treatment of high blood pressure

- The usual starting dose is 1.25mg (2.5ml) or 2.5mg (5ml) once daily.
- Your doctor will adjust the amount you take until your blood pressure is controlled.
- The maximum dose is 10mg (20ml) once daily.
- If you are already taking diuretics (water tablets), your doctor may stop or reduce the amount of the diuretic you take before beginning treatment with Ramipril.

To reduce the risk of you having a heart attack or stroke

- The usual starting dose is 2.5mg (5ml) once daily.
- Your doctor may then decide to increase the amount you take.
- The usual dose is 10mg (20ml) once daily.

Treatment to reduce or delay the worsening of kidney problems

- You may be started on a dose of 1.25mg (2.5ml) or 2.5mg (5ml) once daily.
- Your doctor will adjust the amount you are taking.
- The usual dose is 5mg (10ml) or 10mg (20ml) once daily.

Treatment of heart failure

- The usual starting dose is 1.25mg (2.5ml) once daily.
- Your doctor will adjust the amount you take.
- The maximum dose is 10mg (20ml) daily. Two administrations per day are preferable.

Treatment after you have had a heart attack

- The usual starting dose is 1.25mg (2.5ml) once daily to 2.5mg (5ml) twice daily.
- Your doctor will adjust the amount you take.
- The usual dose is 10mg (20ml) daily. Two administrations per day are preferable.

Elderly

Your doctor will reduce the initial dose and adjust your treatment more slowly.

If you take more Ramipril Oral Solution than you should

Tell a doctor or go to the nearest hospital casualty department straight away. Do not drive to the hospital, get somebody else to take you or call for an ambulance. Take the medicine pack with you. This is so the doctor knows what you have taken.

If you forget to take Ramipril Oral Solution

- If you miss a dose, take your normal dose when it is next due.
- Do not take a double dose to make up for a forgotten dose.

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

4. Possible side effects

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

Stop taking Ramipril and see a doctor straight away, if you notice any of the following serious side effects – you may need urgent medical treatment:

- Swelling of the face, lips or throat which make it difficult to swallow or breathe, as well as itching and rashes. This could be a sign of a severe allergic reaction to Ramipril
- Severe skin reactions including rash, ulcers in your mouth, worsening of a pre-existing skin disease, reddening, blistering or detachment of skin (such as Stevens-Johnson syndrome, toxic epidermal necrolysis or erythema multiforme).

Tell your doctor immediately if you experience:

- Faster heart rate, uneven or forceful heart beat (palpitations), chest pain, tightness in your chest or more serious problems including heart attack and stroke
- Shortness of breath or a cough. These could be signs of lung problems
- Bruising more easily, bleeding for longer than normal, any sign of bleeding (e.g. bleeding from the gums), purple spots, blotching on the skin or getting infections more easily than usual, sore throat and fever, feeling tired, faint, dizzy or having pale skin. These can be signs of blood or bone marrow problems
- Severe stomach pain which may reach through to your back. This could be a sign of pancreatitis (inflammation of the pancreas)
- Fever, chills, tiredness, loss of appetite, stomach pain, feeling sick, yellowing of your skin or eyes (jaundice). These can be signs of liver problems such as hepatitis (inflammation of the liver) or liver damage.

Other side effects include:

Please tell your doctor if any of the following gets serious or lasts longer than a few days.

Common (affects less than 1 in 10 people):

- Headache or feeling tired
- Feeling dizzy. This is more likely to happen when you start taking Ramipril or start taking a higher dose
- Fainting, hypotension (abnormally low blood pressure), especially when you stand or sit up quickly
- Dry tickly cough, inflammation of your sinuses (sinusitis) or bronchitis, shortness of breath
- Stomach or gut pain, diarrhoea, indigestion, feeling or being sick
- Skin rash with or without raised area
- Chest pain
- Cramps or pain in your muscles
- Blood tests showing more potassium than usual in your blood.

Uncommon (affects less than 1 in 100 people):

- Balance problems (vertigo)
- Itching and unusual skin sensations such as numbness, tingling, prickling, burning or creeping on your skin (paraesthesia)
- Loss or change in the way things taste
- Sleep problems
- Feeling depressed, anxious, more nervous than usual or restless
- Blocked nose, difficulty breathing or worsening of asthma
- A swelling in your gut called "intestinal angioedema" presenting with symptoms like abdominal pain, vomiting and diarrhoea
- Heartburn, constipation or dry mouth
- Passing more water (urine) than usual over the day

Continued overleaf

- Sweating more than usual
- Loss or decrease of appetite (anorexia)
- Increased or irregular heart beats
- Swollen arms and legs. This may be a sign of your body holding onto more water than usual
- Flushing
- Blurred vision
- Pain in your joints
- Fever
- Sexual inability in men, reduced sexual desire in men or women
- An increased number of certain white blood cells (eosinophilia) found during a blood test
- Blood tests showing changes in the way your liver, pancreas or kidneys are working.

Rare (affects less than 1 in 1,000 people):

- Feeling shaky or confused
- Red and swollen tongue
- Severe flaking or peeling skin, itchy, lumpy rash
- Nail problems (e.g. loosening or separation of a nail from its bed)
- Skin rash or bruising
- Blotches on your skin and cold extremities
- Red, itchy, swollen or watery eyes
- Disturbed hearing or ringing in your ears
- Feeling weak
- Blood tests showing a decrease in the number of red blood cells, white blood cells or platelets or in the amount of haemoglobin.

Very rare (affects less than 1 in 10,000 people):

- Being more sensitive to the sun than usual.

Other side effects reported:

Please tell your doctor if any of the following gets serious or lasts longer than a few days.

- Difficulty concentrating
- Swollen mouth
- Blood tests showing too few blood cells in your blood
- Blood tests showing less sodium than usual in your blood
- Concentrated urine (dark in colour), feel or are sick, have muscle cramps, confusion and fits which may be due to inappropriate ADH (anti-diuretic hormone) secretion. If you have these symptoms contact your doctor as soon as possible
- Fingers and toes changing colour when you are cold and then tingling or feeling painful when you warm up (Raynaud's phenomenon)
- Breast enlargement in men
- Slowed or impaired reactions
- Burning sensation
- Change in the way things smell
- Hair loss.

If you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

Reporting of side effects

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Ramipril Oral Solution

- Keep this medicine out of the sight and reach of children.
- Store in a refrigerator (2-8°C).
- Do not use this medicine after the expiry date which is stated on the label and carton after EXP. The expiry date refers to the last day of that month.
- Once you open the bottle, it can only be used for 1 month. Write the date you open the bottle on the label.
- Do not use this medicine if you notice anything wrong with the medicine. Talk to your pharmacist.
- 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 to protect the environment.

6. Contents of the pack and other information

What Ramipril Oral Solution contains

- The active substance is ramipril. This medicine contains 2.5mg of ramipril in each 5ml of solution.
- The other ingredients are citric acid (E330), sodium citrate (E331), propylene glycol (E1520), ethyl hydroxybenzoate (E214), butyl hydroxybenzoate, levomenthol and purified water.

What Ramipril Oral Solution looks like and contents of the pack

A clear, colourless solution. It comes in a brown glass bottle holding 150ml of solution. A 2.5ml/5ml double ended spoon is provided to help measure your dose.

Marketing Authorisation Holder and Manufacturer

Rosemont Pharmaceuticals Ltd., Yorkdale Industrial Park, Braithwaite Street, Leeds, LS11 9XE, UK.

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