

# Losaril

Film Coated Tablets



## Composition:

Each Losaril 50/12.5 Film Coated Tablet contains:

Losartan Potassium 50 mg and Hydrochlorothiazide 12.5 mg.

Each Losaril 100/12.5 Film Coated Tablet contains:

Losartan Potassium 100 mg and Hydrochlorothiazide 12.5 mg.

Each Losaril 100/25 Film Coated Tablet contains:

Losartan Potassium 100 mg and Hydrochlorothiazide 25 mg.

## Mechanism of Action:

- Losartan belongs to a class of medicines known as angiotensin II receptors antagonist, which help to control high blood pressure. Angiotensin II binds to the AT1 receptor and causes vasoconstrictor, thus causing your blood pressure to increase. Losartan selectively blocks the AT1 receptor. As a result, blood vessels relax, and blood pressure is lowered.

- Hydrochlorothiazide belongs to a family of thiazide diuretics. The mode of action of thiazides is through inhibition of the (Na<sup>+</sup>/Cl<sup>-</sup>) symporter in the renal distal convoluted tubule, directly increasing sodium and chloride excretion to an approximately equal extent, and indirectly leads to increased urinary potassium loss, and a decrease in serum potassium. The use of angiotensin II receptors blockers (Losartan) tends to reverse the potassium loss associated with these diuretics.

## Pharmacokinetics:

**Losartan:** Following oral administration, losartan is well absorbed and undergoes hepatic first-pass metabolism, forming an active carboxylic acid metabolite and other inactive metabolites. The systemic bioavailability of losartan tablets given orally is approximately 33%. Both losartan and its active metabolite are ≥ 99% bound to plasma proteins, primarily albumin. Both biliary and urinary excretion contribute to the elimination of losartan and its metabolites.

**Hydrochlorothiazide:** The absorption of hydrochlorothiazide, after an oral dose, is rapid (T<sub>max</sub> about 2 h). The absolute bioavailability of hydrochlorothiazide is 70% after oral administration. It is bound to serum proteins (40-70)%, mainly albumin. Hydrochlorothiazide also accumulates in erythrocytes at approximately 3 times the level in plasma. Hydrochlorothiazide is eliminated predominantly as unchanged drug. The average half-life of hydrochlorothiazide is 6 to 15 hours in the terminal elimination phase.

## Indications:

Losaril is indicated for treatment of hypertension, and reduction of the risk of stroke in patients with hypertension and left ventricular hypertrophy.

## Contraindications:

Losaril is contraindicated in case:

- Hypersensitivity to any of the components of the product.

- Hypokalemia, hypercalcaemia refractory to treatment, or hyponatraemia refractory to treatment.

- Symptomatic hyperuricaemia.

- Severe hepatic impairment and severe renal impairment (creatinine clearance less than 30 ml/min).

## Warnings & Precautions:

- As with all antihypertensive therapy, symptomatic hypotension may occur in some patients.

- Treatment with thiazides may impair glucose tolerance. The dose of hypoglycemic drugs, including insulin, may need to be adjusted.

- Losaril is not recommended in patients with primary hyperaldosteronism.

- Increases in cholesterol and triglyceride levels may be associated with thiazide diuretic therapy.

- In patients with heart failure, with or without renal impairment, there is a risk of severe arterial hypotension, and (often acute) renal impairment.

- Losaril should not be given to children and adolescents under 18 years of age due to lack of data on safety and efficacy.

- Losaril should be used with caution patients with:

● Impaired hepatic function or progressive decline in liver function.

● Bilateral renal artery stenosis or stenosis of the artery to a solitary kidney.

● A history of angioedema.

## Pregnancy & Lactation:

**Pregnancy:** Pregnancy Category D, Losaril is contraindicated in pregnancy period. When pregnancy is diagnosed, treatment with Losaril should be stopped immediately.

**Lactation:** Losaril is not recommended for use during breast-feeding, and alternative therapies with better established safety profiles are preferred during breast-feeding, particularly while nursing a newborn or preterm.

## Drug Interactions:

- Other antihypertensive agents may increase the hypotensive action of Losaril.

- NSAIDs: Increased risk of renal impairment and reduced diuretic, natriuretic, and antihypertensive effects.

- Co-administration of lithium and Losaril should be undertaken with caution. If this combination proves essential, serum lithium level should be monitored.

- Concomitant use with potassium supplements, potassium-sparing diuretics or other drugs that may increase potassium levels (heparin) should be undertaken with caution and with frequent monitoring of potassium levels.

- Cholestyramine and Colestipol: significantly reduce the absorption of hydrochlorothiazide.

- Rifampicin and fluconazole cause a decrease in active metabolites levels of losartan.

- Antidiabetics drugs: Dosage adjustment of the antidiabetics drug may be required.

- Anticholinergic agents (e.g., atropine, biperiden): Increase of the bioavailability to thiazide-type diuretics by decreasing gastrointestinal motility and stomach emptying rate.

- Methotrexate: Thiazide diuretics may reduce the renal excretion of methotrexate and thus increase its blood levels.

- Cyclosporine: Concomitant use with Losaril may cause hyperuricaemia and increase the risk of gout.

- Cardiac Glycosides: Hypokalemia or hypomagnesaemia caused by thiazide diuretics may precipitate cardiac glycoside-induced arrhythmias.

- Methyldopa: There have been reports of hemolytic anemia resulting from co-administration with Losaril.

- Corticosteroids, adrenocorticotrophic hormone, or glycyrrhizin (found in licorice): Hydrochlorothiazide may increase the possibility of electrolyte imbalances, especially hypokalemia.

## Side Effects:

- Common side effects: headache, dizziness, insomnia, nausea, diarrhoea, dyspepsia, cough, bronchitis, vertigo, hyperkalemia, fatigue, hypotension, abdominal pain, back pain and cephalalgia.

- Uncommon side effects: somnolence, sleep disorders, palpitations, spasms, stomach irritation, renal dysfunction, obstipation, dyspnoea, cough, pruritus, skin rash, oedema, and fever.

## Driving & using machines:

Dizziness or drowsiness may occur in particular during initiation of treatment or when the dose is increased. Therefore, care must be taken when carrying out the activities.

## Dosage & Administration:

When clinically appropriate, direct change from monotherapy to the fixed combination may be considered and that in patients whose blood pressure is not adequately controlled with monotherapy.

**Hypertension:** usual starting dose: 50/12.5 mg once daily.

The dose is adjusted as needed to a maximum dose of 100/25 mg.

**Hypertensive Patients with Left Ventricular Hypertrophy:** Not controlled on monotherapy: Initiate dose with 50/12.5 mg. And adjust as needed to a maximum of 100/25 mg.

## Overdose:

**Symptoms:** The most likely manifestations of overdose would be hypotension and tachycardia. Bradycardia could occur from parasymphathetic (vagal) stimulation. electrolyte depletion (hypokalemia, hyponatremia, hypocalcemia) and dehydration resulting from excessive diuresis.

**Treatment:** Treatment is symptomatic and supportive. Therapy with Losaril should be discontinued, and the patient observed closely. Suggested measures include induction of emesis if ingestion is recent, and correction of dehydration, electrolyte imbalance, and hypotension by established procedures. Neither losartan nor the active metabolite can be removed by hemodialysis. The degree to which hydrochlorothiazide is removed by hemodialysis has not been established.

**Storage:** Keep out of reach of children. Store below 25° C.

## Packaging:

Each Losaril (50/12.5) - (100/12.5) - (100/25) carton box contains 20 Film Coated Tablets in two blister strips.

\*A medication is a product which affects your health, and it's consumption contrary to instructions is dangerous for you.  
- Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who sold the medication to you.  
- The doctor and the pharmacist experts in medicine, its benefits and risks.  
- Do not repeat the same prescription without consulting your doctor.  
- KEEP THE MEDICAMENTS OUT OF REACH OF CHILDREN.  
- Council of Arab Health Ministers, Union of Arab Pharmacies  
Reva Pharmaceutical Industry - Syria

