Update date: February 1, 2024

Group No. 3: Cardiology

ACETYLSALICYLIC ACID

Clue	Description	Indications	Route of administration and dosage
	TABLETS Each tablet contains: Acetylsalicylic acid 100 mg with or without coating. Package with 28 tablets.	Secondary prevention of cerebral vascular disease (CVD). Reduction in the risk of morbidity and mortality in patients with previous myocardial infarction.	Oral Adults 100 mg every 24 hours
010.000.6222.00			

Generalities

It has antiplatelet effect by inhibiting the enzyme thromboxane synthetase.

Risk in Pregnancy d

Adverse effects

Prolonged bleeding time, tinnitus, hearing loss, nausea, vomiting, gastrointestinal bleeding, toxic hepatitis, ecchymosis, rash, bronchial asthma, hypersensitivity reactions. Reyé syndrome in children under 6 years of age.

Contraindications and Precautions

Hypersensitivity to salicylates and other similar substances, active acid peptic disease, history of bronchial asthma, use in combination with methotrexate, bleeding diathesis, last trimester of pregnancy, severe heart, kidney and/or liver failure.

Interactions

The elimination of acetylsalicylic acid increases with corticosteroids and its effect decreases with antacids. Increases the effect of oral hypoglycemic agents and oral anticoagulants or heparin.

AMLODIPINE

Clue	Description	Indications	Route of administration and dosage
	TABLET OR CAPSULE Each tablet or capsule contains: AmLodipine Besylate or Maleate equivalent to 5 mg of amLodipine. Package with 10 tablets or capsules. Package with 30 tablets or capsules. Each tablet or capsule contains: AmLodipine besylate or maleate Equivalent to 10 mg of amLodipine.	Systemic arterial hypertension. Angina pectoris (stable and Prinzmetal variant).	Oral. Adults: 5 to 10 mg every 24 hours.
010.000.2111.00 010.000.2111.01			

Generalities

Calcium channel blocker that inhibits calcium entry into cardiac and vascular smooth muscle cells.

Risk in Pregnancy d

Adverse effects

Headache, fatigue, nausea, asthenia, drowsiness, edema, palpitations and dizziness.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, the elderly, liver damage and deficiency of myocardial perfusion.

Interactions

With antihypertensives, its hypotensive effect increases.

CAPTOPRIL

Clue	Description	Indications	Route of administration and dosage

010.000.0574.00	TABLET Each tablet contains: Captopril 25 mg. Package with 30 tablets.	Systemic arterial hypertension. Heart failure.	Oral. Adults: 25 to 50 mg every 8 or 12 hours. In heart failure administer 25 mg every 8 or 12 hours. Maximum dose: 450 mg/day. Children: Initial 1.3 to 2.2 mg/kg body weight 0.15 to 0.30 mg/kg body weight/each 8 hours. Maximum daily dose: 6.0 mg/kg body weight. In heart failure, start with 0.25 mg/kg of body weight/day and increase to 3.5 mg/kg of body weight every 8 hours.

Generalities

Inhibits angiotensin-converting enzyme, which prevents the formation of angiotensin II from angiotensin I. Decreases peripheral vascular resistance and reduces sodium and water retention.

Risk in Pregnancy d

Adverse effects

Dry cough, chest pain, proteinuria, headache, dysgeusia, tachycardia, hypotension, fatigue and diarrhea.

Contraindications and Precautions

Contraindications: Hypersensitivity to captopril, renal failure, immunosuppression, hyperkalemia and chronic cough.

Interactions

Diuretics and other antihypertensives increase their hypotensive effect. Non-steroidal anti-inflammatory drugs reduce the antihypertensive effect. Hyperkalemia is favored with potassium salts or potassium-sparing diuretics.

CHLORTHALIDONE

Clue	Description	Indications	Route of administration and dosage
010.000.0561.00	TABLET Each tablet contains: Chlorthalidone 50 mg. Package with 20 tablets.	Peripheral edema. Systemic arterial hypertension.	Oral. Adults: Diuretic: 25 to 100 mg/day. Antihypertensive: 25 to 50 mg/day. Children: 1 to 2 mg/kg body weight or 60 mg/m2 body surface every 48 hours.

Generalities

Diuretic that blocks the reabsorption of sodium and chlorine at the distal tubule level.

Risk in Pregnancy d

Adverse effects

Hyponatremia, hypokalemia, hyperglycemia, hyperuricemia, hypercalcemia, aplastic anemia, hypersensitivity and dehydration.

Contraindications and Precautions

Contraindications: Hypersensitivity to chlorthalidone, anuria, liver failure, kidney failure, metabolic alkalosis, gout, diabetes mellitus and hydroelectrolyte disorders.
Precautions: For chronic treatment, serum potassium concentrations should be monitored at the beginning of therapy and then after 3 to 4 weeks.

Interactions

It increases the hypotensive effect of antihypertensives, increases plasma levels of lithium, and decreases its absorption with cholestyramine.

DIGOXIN

Clue	Description	Indications	Route of administration and dosage
010.000.0502.00	TABLET Each tablet contains: Digoxin 0.25 mg. Package with 20 tablets.	Acute pulmonary edema. Heart failure. Supraventricular tachyarrhythmias. Fibrillation. Atrial flutter.	Oral. Adults: Load: 0.4 to 0.6 mg. Subsequent 1st day: 0.1 to 0.3 mg each 8 hours. Maintenance: 0.125 to 0.5 mg every 8 hours.
010.000.0503.00	ELIXIR Each mL contains: Digoxin 0.05 mg. Container containing 60 mL with a 1 mL calibrated dropper integrated or attached to the bottle and serves as a lid.		Oral. Children: Premature babies: 15 to 40 mcg/kg body weight. Newborn: 30 to 50 mcg/kg body weight. Two to five years: 25 to 35 mcg/kg body weight. Five to ten years: 15 to 30µmcg/kg body weight. Over ten years: 8 to 12 µg/kg body weight. Note: The impregnation dose must be administered within 24 hours. Half of the calculated dose is administered immediately, a quarter 8 hours later, and the remaining quarter 16 hours after the first. The daily maintenance dose corresponds to 1/3 of the impregnation dose and should be administered 24 hours after the last impregnation dose.
010.000.0504.00	INJECTABLE SOLUTION Each vial contains: Digoxin 0.5 mg. Container with 6 vials of 2 mL.		Intravenous. Adults: Initial: 0.5 mg followed by 0.25 mg every 8 hours, for one or two days. Maintenance: half the impregnation dose in one dose every 24 hours. Then continue with oral medication. Children: Use 2/3 parts of the calculated oral dose. The safety margin is very narrow.

Generalities

They reinforce myocardial contraction by promoting movement of calcium to the intracellular cytoplasm and inhibiting sodium potassium ATPase.

Risk in Pregnancy

c

Adverse effects

Anorexia, nausea, vomiting, diarrhea, bradycardia, ventricular arrhythmias, atrioventricular block, insomnia, depression and confusion.

Contraindications and Precautions

Contraindications: Hypersensitivity to digitalis, hypokalemia, hypercalcemia and ventricular tachycardia.

Interactions

Antacids and cholestyramine decrease its absorption. Adverse effects increase with medications that cause hypokalemia (amphotericin B, prednisone). With calcium salts it can cause serious arrhythmias.

ENALAPRIL

Clue	Description	Indications	Route of administration and dosage
010.000.2501.00	CAPSULE OR TABLET Each capsule or tablet contains: Enalapril maleate 10 mg. Package with 30 capsules or tablets.	Arterial hypertension systemic.	Oral. Adults: Initial: 10 mg per day and adjust according to response. Usual dose: 10 to 40 mg per day.

Generalities

They inhibit angiotensin-converting enzyme, which prevents the formation of angiotensin II from angiotensin.

vo.

Risk in Pregnancy

d

Adverse effects

Headache, dizziness, insomnia, nausea, diarrhea, rash, angioedema and agranulocytosis.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug.
Precautions: In patients with kidney damage, diabetes, heart failure and vascular disease.

Interactions

Its effect decreases with non-steroidal anti-inflammatory drugs, metal poisoning can occur with lithium, and potassium supplements increase the risk of hyperkalemia.

EPINEPHRINE

Clue	Description	Indications	Route of administration and dosage
010.000.0611.00	INJECTABLE SOLUTION Each vial contains: Epinephrine 1 mg (1:1,000). Container with 50 vials with 1 mL.	Anaphylactic shock. Heart attack. Capillary hemorrhage. Bronchospasm.	Subcutaneous or intramuscular. Slow intravenous (5 to 10 minutes). Adults: Intravenous: 0.1 to 0.25 mg. Subcutaneous or intramuscular: 0.1 to 0.5 mg. Children: Subcutaneous: 0.01 mg/kg body weight or 0.3 mg/m2 body surface. Infusion: 0.1 to 1.5 µg/kg body weight. Do not exceed 0.5 mg. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

It stimulates the ÿ and ÿ adrenergic receptors of the sympathetic nervous system.

Risk in Pregnancy

c

Adverse effects

Arterial hypertension, cardiac arrhythmias, anxiety, tremor, chills, headache, tachycardia, angina pectoris, hyperglycemia, hypokalemia, pulmonary edema, local necrosis at the injection site.

Contraindications and Precautions

Contraindications: Cerebral vascular insufficiency, in general anesthesia with halogenated hydrocarbons, coronary insufficiency, shock other than anaphylactic, glaucoma and hyperthyroidism. In labor and in vascular endings (fingers, ears, nose and penis).

Precautions: Should not be mixed with alkaline solutions.

Interactions

Tricyclic antidepressants, antihistamines and levothyroxine increase its effects. Concomitant use with digitalis can precipitate cardiac arrhythmias; adrenergic blockers antagonize its effect.

FELODIPINE

Clue	Description	Indications	Route of administration and dosage
	RELEASE TABLET PROLONGED Each tablet contains: Felodipine 5 mg.	Angina pectoris Systemic arterial hypertension. Congestive heart failure.	Oral. Adults: 5 to 10 mg/day. Maximum 20 mg/day.
010.000.2114.00	Package with 10 prolonged release tablets.		

Generalities

Calcium channel blocker with vascular selectivity compared to myocardial selectivity.

Risk in Pregnancy

c

Adverse effects

Due to its arteriolar vasodilator effect: Nausea, dizziness, headache, flushing, arterial hypotension. Other effects: Constipation and edema.

Contraindications and Precautions

Contraindications: Cardiogenic shock, atrioventricular block, arterial hypotension, asthma and concomitant with beta blockers.

Interactions

Hypotension and heart failure are favored with beta blockers. Enzymatic inducers favor its biotransformation.

HYDRALAZINE

Clue	Description	Indications	Route of administration and dosage
	TABLET Each tablet contains: Hydralazine Hydrochloride 10 mg.	Systemic arterial hypertension. Chronic congestive heart failure. Preeclampsia or eclampsia. Hypertensive crisis.	Oral. Start with 10 mg daily every 6 or 12 hours, the dose can be increased to 150 mg/day according to therapeutic response. Children: 0.75 to 1 mg/kg body weight/day, divided into 4 doses. Maximum dose: 4.0 mg/kg body weight/day.
010.000.0570.00	Package with 20 tablets.		

010.000.4201.00	INJECTABLE SOLUTION Each vial or vial contains: Hydralazine Hydrochloride 20 mg. Container with 5 vials or 5 vials with 1.0 mL.		Intramuscular or slow intravenous. Adults: 20 to 40 mg. Eclampsia: 5 to 10 mg every 20 minutes, if there is no effect with 20 mg, use another antihypertensive.

Generalities

Relaxes the smooth muscle of arterioles producing hypotension and reflex cardiac stimulation.

Risk in Pregnancy C

Adverse effects

Headache, tachycardia, angina pectoris, hot flashes, generalized lupus erythematosus, anorexia, nausea, tinnitus, nasal congestion, lacrimation, conjunctivitis, paresthesias and edema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug; heart and coronary failure, dissecting aortic aneurysm and mitral valve disease.

Interactions

Increases the response of antihypertensives.

ISOSORBIDE

Clue	Description	Indications	Route of administration and dosage
010.000.0592.00	SUBLINGUAL TABLET Each tablet contains: Isosorbide dinitrate 5 mg. Package with 20 sublingual tablets.	Angina pectoris. Chronic ischemic heart disease. Heart failure.	Sublingual. Adults: 2.5 to 10 mg, repeat every 5 to 15 minutes (maximum 3 doses in 30 minutes).
010.000.0593.00	TABLET Each tablet contains: Isosorbide dinitrate 10 mg. Package with 20 tablets.		Oral Adults: 5 to 30 mg every six hours. Heart failure: 20 to 40 mg every 4 hours.

Generalities

Nitrate that reduces the requirement and increases the supply of oxygen to the myocardium. Vasodilation increases coronary flow.

Risk in Pregnancy C

Adverse effects

Tachycardia, dizziness, orthostatic hypotension, headache, restlessness, vomiting and nausea.

Contraindications and Precautions

Contraindications: Arterial hypotension, anemia, head trauma, and liver or kidney dysfunction.

Interactions

With antihypertensives, opiates and ethyl alcohol, hypotension increases. Adrenergic medications decrease its antianginal effect.

METOPROLOL

Clue	Description	Indications	Route of administration and dosage
	TABLET Each tablet contains: Metoprolol tartrate 100 mg.	Mild or moderate arterial hypertension. Prophylaxis in myocardial ischemic disease.	Oral. Adults: 100 to 400 mg every 8 or 12 hours.

010.000.0572.00	Container with 20 tablets.		Prophylaxis: 100 mg every 12 hours.

Generalities

Cardioselective antagonist, which blocks the beta one receptor and produces a decrease in myocardial activity.

Risk in Pregnancy b

Adverse effects

Arterial hypotension, bradycardia, nausea, vomiting, abdominal pain, fatigue, depression, diarrhea and headache.

Contraindications and Precautions

Contraindications: Drug hypersensitivity, delay in atrioventricular conduction, heart failure and myocardial infarction.

Precautions: In obstructive airway conditions and liver cirrhosis.

Interactions

Bradycardia and depression of myocardial activity with digitalis. Verapamil or chlorpromazine decrease its hepatic biotransformation. Indomethacin reduces the hypotensive effect. Rifampicin and phenobarbital increase its biotransformation.

NIFEDIPINE

Clue	Description	Indications	Route of administration and dosage
010.000.0597.00	SOFT GELATIN CAPSULE Each capsule contains: Nifedipine 10 mg. Container with 20 capsules.	Angina pectoris. Essential arterial hypertension.	Oral. Adults: 30 to 90 mg/day, divided into three Tomas. Increase the dose in periods of 7 to 14 days until the effect is achieved wanted. Maximum dose 120 mg/day.
010.000.0599.00	RELEASE TABLET PROLONGED Each tablet contains: Nifedipine 30 mg. Package with 30 tablets.		Oral. Adults: 30 mg every 24 hours, maximum dose 60 mg/day.

Generalities

Calcium channel blocker in cardiac and smooth muscle.

Risk in Pregnancy c

Adverse effects

Nausea, dizziness, headache, flushing, hypotension, constipation and edema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, cardiogenic shock, atrioventricular block, arterial hypotension, asthma and beta blockers.
Precautions: In altered liver function.

Interactions

With beta blockers hypotension and heart failure are favored, ranitidine decreases its biotransformation and with grapefruit juice it can increase its hypotensive effect, with diltiazem it decreases its clearance and phenytoin decreases its bioavailability.

PENTOXYFYLLINE

Clue	Description	Indications	Route of administration and dosage
	TABLET OR DRAGEEE EXTENDED RELEASE Each tablet or dragee contains:	Intermittent claudication. Peripheral vascular insufficiency.	Oral. Adults:

010.000.4117.00	Pentoxifylline 400 mg. Package with 30 tablets or dragees.	Cerebrovascular insufficiency.	400 mg every eight or twelve hours.

Generalities

Methylxanthine derivative that reduces blood viscosity and gives flexibility to the erythrocyte, thereby improving capillary blood flow.

Risk in Pregnancy

C

Adverse effects

Headache, dizziness, nausea, vomiting and gastrointestinal pain.

Contraindications and Precautions

Contraindications: Hypersensitivity to caffeine, theophylline and theobromine, cerebral hemorrhage and breastfeeding.
Precautions: In cardiac arrhythmias, arterial hypotension, myocardial infarction and renal failure.

Interactions

Increases the effect of antihypertensives, anticoagulants and insulin.

POTASSIUM, SALTS

Clue	Description	Indications	Route of administration and dosage
010.000.0523.00	SOLUBLE TABLET OR EFFERVESCENT Each tablet contains: Potassium Bicarbonate 766 mg. Potassium Bitartrate 460 mg. Citric Acid 155 mg. Container with 50 soluble tablets.	Hypokalemia. Digitalis poisoning.	Oral. Adults: One to two tablets dissolved in 180 to 240 mL of water every 8 to 24 hours. The total daily dose should not exceed 150 mEq. Children: 25 mEq/day, divided every 6 hours. The total daily dose should not exceed 3 mEq/kg body weight. Each tablet provides 10 mEq = 390 mg of potassium.

Generalities

Electrolyte essential for cardiac function and reduces the digitalis-enzyme association in digitalis poisoning.

Risk in Pregnancy

TO

Adverse effects

Cardiac arrhythmias, nausea, vomiting and abdominal pain. Paresthesias, mental confusion. Diluted in quantities less than 180 mL of water causes gastrointestinal irritation.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, renal failure, Addison's disease, acute dehydration, hyperkalemia and cardiac disorders.

Precautions: In heart disease, kidney disease or acidosis.

Interactions

Reduces the risk of hypokalemia in patients receiving diuretics and corticosteroids. With anticholinergics, gastrointestinal irritation increases. Hyperkalemia is favored with potassium-sparing diuretics.

PROPRANOLOL

Clue	Description	Indications	Route of administration and dosage
	TABLET		Oral.

010.000.0530.00	Each tablet contains: Propranolol Hydrochloride 40 mg. Package with 30 tablets.	Systemic arterial hypertension. Angina pectoris. Migraine prophylaxis. Supraventricular arrhythmia. Portal hypertension. Pheochromocytoma.	Adults: Antihypertensive: 40 mg every 12 hours. Antiarrhythmic, hyperthyroidism and pheochromocytoma: 10 to 80 mg every 6 to 8 hours. Antianginal: 180 to 240 mg divided into three or four doses. Migraine: 80 mg every 8 to 12 hours. Children: Antihypertensive: 1 to 5 mg/kg/day, every 6 to 12 hours. Antiarrhythmic, hyperthyroidism and pheochromocytoma: 0.5 to 5 mg/kg body weight/day, divided dose every 6 to 8 hours. Migraine: children under 35 kg 10 to 20 mg every 8 hours, over 35 kg; 20 to 40 mg every 8 hours.
010.000.0539.00	TABLET Each tablet contains: Propranolol Hydrochloride 10 mg Package with 30 tablets.		

Generalities

ÿ adrenergic antagonist that reduces cardiac oxygen demand, heart rate, blood pressure and muscle tremor.

Risk in Pregnancy

C

Adverse effects

Bradycardia, hypotension, constipation, fatigue, depression, insomnia, hallucinations, hypoglycemia, bronchospasm, hypersensitivity. Abrupt withdrawal of the medication can cause angina pectoris or myocardial infarction.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, heart failure, asthma, atrioventricular conduction delay, bradycardia, diabetes, Reynaud's syndrome and hypoglycemia.
Precautions: In kidney or liver failure.

Interactions

With anesthetics, digitalis or antiarrhythmics, bradycardia increases. Bradycardia is antagonized with anticholinergics. Non-steroidal anti-inflammatories block the hypotensive effect. Increases the muscle relaxing effect of pancuronium and vecuronium.

GLYCERYL TRINITRATE

Clue	Description	Indications	Route of administration and dosage
010.000.0591.00	CAPSULE OR TABLET CHEWABLE Each capsule or chewable tablet contains: Glycerol Trinitrate 0.8 mg. Package with 24 chewable capsules or tablets.	Angina pectoris. Chronic ischemic heart disease. Heart failure.	Oral or subingual. Adults: 0.8 mg that can be repeated after 5 or 10 minutes.

Generalities

Nitrate that reduces the requirement and increases the supply of oxygen to the myocardium. Vasodilation increases coronary flow.

Risk in Pregnancy

C

Adverse effects

Headache, tachycardia, hypotension and dizziness.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, arterial hypotension, head trauma, cardiomyopathy and anemia.

Interactions

With antihypertensives, opiates and ethyl alcohol, hypotension increases. Adrenergic medications decrease its antianginal effect.

ACETYLSALICYLIC ACID/ ATORVASTATIN/ RAMIPRIL

Clue	Description	Indications	Route of administration and dosage
010.000.6242.00	CAPSULES Each Capsule contains: Acid acetylsalicylic acid 100 mg Atorvastatin calcium trihydrate 40 mg Ramipril 5 mg Box with 28 Capsules	Treatment of hypertension and dyslipidemia, secondary prevention of cardiovascular events.	Oral. 1 capsule a day after food

Generalities

Atorvastaine: competitively inhibits HMG-CoA reductase, an enzyme that limits the rate of cholesterol biosynthesis, and inhibits cholesterol synthesis in the liver.
Acetylsalicylic acid: inhibits the synthesis of prostaglandins, which prevents the stimulation of pain receptors by bradykinin and other substances. Irreversible antiplatelet effect. Ramipril is an ACE inhibitor,
generating reduced concentrations of angiotensin II, which induces a decrease in vasopressor activity and reduction in aldosterone secretion

Risk in Pregnancy

X (Contraindicated in pregnancy).

Adverse effects

Gastrointestinal discomfort such as heartburn, nausea, vomiting, stomach pain and diarrhea. Minor gastrointestinal bleeding (microhemorrhage).

Contraindications and Precautions

Contraindicated in severe renal failure and hemodialysis. Caution in renal failure if Clcr is ÿ 60 mL/min, max daily dose. of ramipril: 10 mg. If Clcr 30-60 mL/min, max daily dose. of ramipril: 5 mg. Hypersensitivity to acetylsalicylic acid, atorvastatin, ramipril, other salicylates, NSAIDs, any other ACEI. History of asthma attack or other allergic reaction to salicylic acid and other non-steroidal analgesics/anti-inflammatory drugs. Active recurrent peptic ulcer or history and/or gastric/intestinal bleeding, or other types of bleeding such as cerebrovascular hemorrhages. Hemophilia and other bleeding disorders. Severe IH and IR. Patients on hemodialysis.
Severe heart failure. Concomitant with methotrexate in weekly doses ÿ 15 mg. Concomitant with aliskiren is contraindicated in diabetes mellitus or IR (GFR < 60 mL/min/1.73 m 2). Nasal polyps associated with asthma induced or exacerbated by ASA. Active liver disease or persistent unexplained elevations in serum transaminases exceeding 3 times the ULN. Pregnancy and lactation and in women of childbearing age who do not use reliable contraceptive methods. Concomitant with tipranavir, ritonavir or cyclosporine, due to the risk of rhabdomyolysis. History of angioedema (hereditary, idiopathic, or due to previous angioedema with ACE inhibitors or angiotensin II receptor antagonists. Extracorporeal treatments involving contact of blood with negatively charged surfaces. Significant bilateral renal artery stenosis or arterial stenosis renal in only one functioning kidney. Ramipril should not be administered to hypotensive or hemodynamically unstable patients. Children and adolescents < 18 years. In children < 16 years of age with fever, flu or chickenpox, there is a risk of Reye's Syndrome.

Interactions

Due to acetylsalicylic acid: Prolongation of clotting time with: ticlopidine, clopidogrel. Risk of bleeding increased with: NSAIDs, systemic glucocorticosteroids (except hydrocortisone as replacement treatment in Addison's disease), alcohol, anticoagulants, thrombolytics Risk of acute kidney failure with: diuretics, ACE inhibitors, ARBs. Plasma concentrations increased with: uricosurics
Increases nephrotoxicity of: cyclosporine. Increases the effect of: insulin and sulfonylureas.
Reduces the effect of: alpha interferon, beta-blocking antihypertensives, uricosurics (probenecid and sulfinpyrazone), ACEI, ARB. Increases risk of ototoxicity from: vancomycin. Increases plasma concentrations of: barbiturates, digoxin, phenytoin, lithium, zidovudine, valproic acid, methotrexate (do not combine with methotrexate at doses 15 mg/wk or higher and at low doses, monitor blood count and kidney function).
Enhances the action and toxicity of: acetazolamide. Renal elimination increased by: antacids. Plasma concentrations increased by: uricosurics.
Toxicity enhanced by: cimetidine, ranitidine, zidovudine. Due to atorvastatin:
Plasma levels increased by: strong CYP3A4 inhibitors (e.g. cyclosporine, telithromycin, clarithromycin, delavirdine, stiripentol, ketoconazole, voriconazole, itraconazole, posaconazole and HIV protease inhibitors such as

ritonavir, lopinavir, atazanavir, indinavir, darunavir, etc.); moderate CYP3A4 inhibitors (e.g., erythromycin, diltiazem, verapamil, and fluconazole), grapefruit juice, cyclosporine. Plasma levels decreased by: cytochrome P450 3A4 inducers (e.g., efavirenz, rifampicin, St. John's wort). Risk of rhabdomyolysis with: gemfibrozil/fibric acid derivatives, ezetimibe, fusidic acid. Risk of myopathy with colchicine. Increases plasma concentrations of: norethindrone and ethinyl estradiol, digoxin. Due to ramipril: Extracorporeal treatments that involve blood contact with negatively charged surfaces, such as dialysis or hemofiltration with certain high-flux membranes and low-density lipoprotein apheresis with dextran sulfate, are contraindicated due to the increased risk of reactions. severe anaphylactoids. Potentiation of hypotension with: diuretics, nitrates, tricyclic antidepressants, anesthetics. Antihypertensive effect reduced by: sympathomimetic vasopressors, NSAIDs, isoproterenol, dobutamine, dopamine, epinephrine.

Increased alterations in blood count with: allopurinol, immunosuppressants, corticosteroids. Increases toxicity of: lithium. Increases hypoglycemic effect of: insulin and sulfonylurea derivatives. Increased risk of hyperkalemia: potassium salts, heparin, potassium-sparing diuretics, angiotensin II antagonists, trimethoprim, tacrolimus.
Increased risk of hypotension with: antihypertensives (e.g., diuretics) nitrates, tricyclic antidepressants, anesthetics, acute alcohol ingestion, baclofen, alfuzosin, doxazosin, prazosin, tamsulosin, terazosin

ACETYLSALICYLIC ACID, SIMVASTATIN, RAMIPRIL

Clue	Description	Indications	Route of administration and dosage
010.000.6049.00	CAPSULE Each capsule contains: Acetylsalicylic acid 100 mg Simvastatin 40 mg Ramipril 5 mg Container with 28 capsules.	Secondary prevention of cardiovascular events.	Oral. Adults: One capsule every 24 hours.

Generalities

Acetylsalicylic acid has an antiplatelet effect by inhibiting the enzyme thromboxane synthetase, simvastatin is an inactive lactone that in vivo is rapidly transformed by hydrolysis into the corresponding b-hydroxy acid which is a potent inhibitor of HMG-CoA reductase. They inhibit the angiotensin-converting enzyme, which prevents the formation of angiotensin II from angiotensin I.

Risk in Pregnancy

x

Adverse effects

Heartburn, nausea, vomiting, gastralgia, diarrhea and mild gastrointestinal bleeding.

Contraindications and Precautions

Contraindications: Hypersensitivity to drugs
Precautions: Hypersensitivity to other analgesics/anti-inflammatories/antirheumatics or to other allergens. Other known allergies (skin reactions, pruritus, urticaria), bronchial asthma, allergic rhinitis, inflammation of the nasal mucous membranes (adenoid hyperplasia) and other chronic respiratory diseases. Concomitant treatment with anticoagulants. Patients with a history of gastric or intestinal ulcers or gastrointestinal bleeding. Patients with liver or kidney dysfunction. Patients at risk of hyperuricemia. Low doses of acetylsalicylic acid reduce the elimination of uric acid, which can trigger a gout attack.

Interactions

Strong CYP3A4 inhibitors, gemfibrozil, cyclosporine, danazol, amiodarone, verapamil.

ADENOSINE

Clue	Description	Indications	Route of administration and dosage
010.000.5099.00	INJECTABLE SOLUTION Each vial contains: Adenosine 6 mg. Container with 6 vials with 2 mL.	Paroxysmal supraventricular tachycardia.	Intravenous. Adults: 3 to 6 mg, if there is no response administer 6 to 12 mg. Children: 0.05 mg/kg body weight, a maximum dose of 0.25 mg/kg body weight can be administered.

Generalities

Endogenous purine nucleotide that causes a profound depression in atrioventricular conduction without producing a negative inotropic effect.

Risk in Pregnancy

C

Adverse effects

Dyspnea, facial flushing, chest pain, hypotension, nausea, anxiety.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, atrial fluter, sick sinus syndrome and bronchial asthma.

Interactions

Dipyridamole enhances its effects. Carbamazepine and methylxanthines antagonize its effect.

ALPROSTADIL

Clue	Description	Indications	Route of administration and dosage
010.000.5631.00	INJECTABLE SOLUTION Each vial with lyophilized or solution contains: Alprostadil 20 µg. Container with a vial.	Treatment of the disease peripheral arterial occlusion, stages III and IV when surgery is contraindicated.	Intravenous. Adults: 40 µg twice a day.
010.000.6051.00	INJECTABLE SOLUTION Each vial contains: Alprostadil 500 µg. Container with 5 vials with 1 mL each (500 µg/mL).	Treatment of of the Congenital Cardiovascular Malformations in which it is necessary to maintain the ductus arteriosus persistent, while definitive surgical correction is performed. Such as: - Malformations with restricted pulmonary blood flow such as: atresia pulmonary, stenosis pulmonary, tricuspid atresia, tetralogy of Fallot. - Malformations with restricted systemic blood flow such as: coarctation of the aorta, interruption of the aortic arch with valvular stenosis or atresia of the left heart. - Transposition of the large vessels with or without other defects.	Intravenous. Start with 50 – 100 ng of alprostadil/kg/min

Generalities

Alprostadil is a prostaglandin EI (PGEI), whose most notable pharmacological action is the vasodilator and antiplatelet effect, by relaxing the arteries and pre-capillary sphincters, improving the flexibility of erythrocytes and inhibiting their aggregation. It also reduces thrombocytogenesis, fibrin and lipid deposition, improves microcirculation by increasing oxygen and glucose supplements, and allows the use of these substrates by ischemic tissues.

Risk in Pregnancy

C

Adverse effects

Apnea, fever, flushing, hypotension, bradycardia, tachycardia, diarrhea and muscle cramps or spasms.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug. Respiratory stress syndrome, permanence of the spontaneous ductus arteriosus open. Patients with uncontrolled cardiac arrhythmias and coronary artery disease. Myocardial infarction or cerebral vascular disease diagnosed within 6 months prior to the start of therapy. Patients with suspected pulmonary edema based on clinical or radiological findings (e.g. pulmonary infiltrations) and in severe cases of chronic obstructive respiratory disease.

Precautions: Patients with signs of acute liver damage (elevated transaminases or gamma TG activity) and in subjects in whom bleeding complications are anticipated (acute gastritis or gastric or duodenal ulcer).

Interactions

Simultaneous administration with drugs with hematological potential (anticoagulants, coumaric derivatives, heparin, platelet and thrombocyte aggregation inhibitors) may increase the risk of bleeding. Simultaneous administration with antibiotics from the cephalosporin group (cefamandole, cefoperazone) or moxalactam may alter coagulation factors. Simultaneous administration with alpha sympathomimetics (mataraminol, epinephrine, phenylephrine) reduces the vasodilatory activity of alprostadil 500 µg. With vasodilators and diuretics it can cause hypotension.

ALTEPLASA

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Acute infarction of the myocardium.	Intravenous: bolus followed by infusion.
	Each vial with lyophilisate contains:	Pulmonary embolism.	Acute myocardial infarction (first 6 hours).
	Alteplase (human tissue plasminogen activator) 50 mg.	Cerebral vascular event.	Adults:
010.000.5107.00	Package with 2 vials with lyophilisate, 2 vials with solvent and sterilized equipment for reconstitution.		15 mg bolus and then 50 mg infusion over 30 minutes, followed by 35 mg infusion over 60 minutes (maximum 100 mg).
			In patients with body weight <65 kg administer 1.5 mg/ kg body weight.

Generalities

Medication obtained by genetic engineering, identical to the human tissue plasminogen activator, so it is devoid of immune activity, with biochemical and kinetic characteristics comparable to those of the natural enzyme; It causes rapid vascular repermeabilization that leads to the preservation of ventricular function.

Risk in Pregnancy

x

Adverse effects

Superficial or internal bleeding, cardiac arrhythmias, embolization of cholesterol crystals, thrombotic embolization, nausea, vomiting, anaphylactoid reactions, arterial hypotension, hyperthermia and bronchospasm.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, treatment with anticoagulants, hemorrhagic diathesis, active or recent hemorrhage, history of recent hemorrhagic stroke, severe or uncontrolled arterial hypertension, bacterial endocarditis or pericarditis, acute pancreatitis or peptic ulcer in the last three months, esophageal varices and arterial aneurysms.

Precautions: in case of bleeding, arrhythmias, middle cerebral embolism.

Interactions

The prior or simultaneous administration of anticoagulants and platelet aggregation inhibitors increases the risk of bleeding.

AMIODARONE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Cardiac arrhythmias.	Slow intravenous infusion (20-120 minutes) Intravenous injection (1-3 minutes).
	Each vial contains: hydrochloride amiodarone 150 mg.	Wolff-Parkinson-White syndrome.	Adults: Intravenous injection 5 mg/kg body weight.
		Bradycardia-tachycardia syndrome.	Loading dose: 5 mg/kg body weight in 250 mL of 5% glucose solution, in slow intravenous infusion.
010.000.4107.00	Container with 6 vials of 3 mL.	Coronary insufficiency.	Administer diluted in intravenous solutions packaged in glass bottles.
	TABLET		Oral.

010.000.4110.00	Each tablet contains: hydrochloride amiodarone 200 mg. Package with 20 tablets.		Adults: Loading dose: 200 to 400 mg every 8 hours for two to three weeks. Support: 100 to 400 mg/day, for five days a week. Children: 10-15 mg/kg body weight/day for 4 to 14 days. Support: 5 mg/kg body weight/day, divided every 8 hours.

Generalities

Potassium channel blocker that prolongs the action potential and decreases repolarization.

Risk in Pregnancy d

Adverse effects

Nausea, vomiting, photosensitivity, corneal microdeposits, pneumonitis, alveolitis, pulmonary fibrosis, fatigue, headache.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, heart failure, cardiac conduction disorders, bradycardia.

Precautions: Before starting treatment, perform ECG tests of thyroid function and serum potassium levels. Sun exposure should be avoided or protective measures used during therapy. In case of surgical intervention, the anesthesiologist must be warned.

Interactions

The hypotensive effect is increased with antihypertensives. Increases the depressant effects on the myocardium with ÿ blockers and calcium antagonists. Increases the anticoagulant effect of warfarin.

AMLODIPINE/ VALSARTAN/ HYDROCHLOROTHIAZIDE

Clue	Description	Indications for	Route of administration and dosage
010.000.5800.00	COMPRESSED Each tablet contains: AmLodipine besylate equivalent to 5 mg AmLodipine Valsartan 160 mg. Hydrochlorothiazide 12.5 mg. Package with 28 tablets.	the treatment of Arterial Hypertension not controlled with two antihypertensive drugs and requiring 3 drugs.	Oral. Adults: 1 tablet every 24 hours.

Generalities

Valsartan/AmLodipine/Hydrochlorothiazide combines three antihypertensive compounds that act in a complementary manner to control blood pressure in patients with systemic arterial hypertension: AmLodipine, which belongs to the class of calcium channel blockers, Valsartan, a member of the class of angiotensin II receptor blockers and Hydrochlorothiazide a thiazide diuretic. It is indicated in patients whose blood pressure is not adequately controlled in combination therapy or as replacement therapy in patients currently receiving AmLodipine, Valsartan and Hydrochlorothiazide at the same dose of the individual tablets.

Risk in Pregnancy x

Adverse effects

The most frequent reactions are: Nasopharyngitis, headache, peripheral edema, edema, fatigue, facial redness, asthenia, dyspepsia, vertigo, tachycardia, palpitations, orthostatic hypotension, cough, pharyngeal pain, diarrhea, nausea, abdominal pain, constipation, dry mouth, rash, erythema, joint inflammation, low back pain, arthralgia.

Contraindications and Precautions

Known hypersensitivity to the components of this product or sulfonamides. Pregnancy. Severe alteration of liver function, severe alteration of renal function (creatinine clearance < 30 mL/min), anuria, refractory hypokalemia, hyponatremia, hyperkalemia and symptomatic hyperuricemia.

Interactions

Monitoring when used concomitantly with lithium. Caution when used concomitantly with drugs that may increase potassium levels. Caution when used in combination with other antihypertensives,

curare derivatives, non-steroidal anti-inflammatory drugs, corticosteroids, adrecorticotropin hormone, amphotericin, carbenoxin, Penicillin G, salicylic acid derivatives, digoxin, antidiabetic agents, allopurinol, amantadite, diaxoside, cytotoxic drugs, anticholinergic agents, methyldopa, cholestyramine, Vitamin D, salts calcium, carbamazepine and cyclosporine.

ATORVASTATIN/ EZETIMIBA

Clue	Description	Indications	Route of administration and dosage
010.000.6263.00	CAPSULE OR TABLET Each capsule or tablet contains: Atorvastatin calcium trihydrate 40.0 mg. And Ezetimibe 10.0mg Package with 30 capsules or tablets.	Mixed hypercholesterolemia when Atorvastatin monotherapy is insufficient to achieve goals. Established ischemic heart disease, history of acute coronary syndrome. Primary hypercholesterolemia (heterozygous familial and non-familial) Familial primary hypercholesterolemia, homozygous. Secondary cardiovascular prevention in the absence of response to monotherapy.	Oral. With or without food Adults: Initial: 10/10 mg per day and adjust according to response, with maximum dose of 10 mg (Ezetimibe)/80 mg (Atorvastatin). Ezetimibe should not exceed 10 mg per day Usual dose: 10/10 mg per day.

Generalities

Atorvastatin is a statin, part of the family of HMG-CoA reductase inhibitors. It is metabolized through cytochrome P450 3A4 (CYP3A4) and is a substrate of hepatic transporters. Ezetimibe inhibits intestinal cholesterol absorption through the sterol transporter, Niemann-Pick C1-Like 1 (NPC1L1), responsible for intestinal uptake of cholesterol and phytosterols.

Risk in Pregnancy

d

Adverse effects

Statins may exceptionally affect skeletal muscle and cause myalgia, myositis and myopathy, which may rarely progress, especially in combination with fibrates, to rhabdomyolysis, characterized by significantly elevated levels of creatine kinase (CK) (>10 times the upper limit of normality), myoglobinemia and myoglobinuria, and this progresses to renal failure.

The use of ezetimibe alone is associated with muscle-related effects, including rhabdomyolysis. In preclinical studies, ezetimibe has been shown not to induce cytochrome P450 drug-metabolizing enzymes. No clinically important pharmacokinetic interactions have been observed between ezetimibe and known drugs.
metabolized by cytochromes P450 1A2, 2D6, 2C8, 2C9 and 3A4 or by N-acetyltransferase.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, pregnancy and lactation, in patients with active liver disease or unexplained persistent elevation of serum transaminases that exceed 3 times the upper limit of normality.
In patients treated with antivirals for hepatitis C (glecaprevir/pibrentasvir).

Interactions

Its effect decreases with non-steroidal anti-inflammatory drugs, or its intake with food (grapefruit juice or substrate); metal poisoning may occur concomitantly with lithium; potassium supplements increase the risk of hyperkalemia.

Concomitant administration of drugs that inhibit CYP3A4 or transporter proteins may result in increased plasma concentrations of atorvastatin and increase the risk of myopathy (e.g., cyclosporine,
telithromycin, clarithromycin, delavirdine, stiripentol, ketoconazole, voriconazole, itraconazole, posaconazole, some antivirals used in the treatment of HCV (e.g. elbasvir/grazoprevir) and HIV protease inhibitors, including
ritonavir, lopinavir, atazanavir, indinavir, darunavir, etc.) and moderate CYP3A4 inhibitors (e.g., erythromycin, diltiazem, verapamil, and fluconazole) as well. Efavirenz, rifampicin or St. John's wort may cause reductions
Variable plasma concentrations of atorvastatin as they are inducers of cytochrome P450 3A4.

AZILSARTAN MEDOXOMIL

Clue	Description	Indications	Route of administration and dosage
	TABLET Each tablet contains: Azilsartan medoxomil	Treatment of systemic arterial hypertension.	Oral. Adults: 80 mg every 24 hours.

010.000.5645.01	of potassium equivalent to 80 mg of azilsartan medoxomil. Package with 28 tablets.		

Generalities

Azilsartan medoxomil is an orally active prodrug, which is rapidly converted to its active metabolite, azilsartan, which selectively antagonizes the effects of angiotensin II by blocking its binding to the AT1 receptor in multiple tissues.

Risk in Pregnancy

d

Adverse effects

Headache, dizziness, diarrhea, nausea, increased blood creatine phosphokinase.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug.
Precautions: Caution should be used in hypertensive patients with severe renal failure, congestive heart failure, or renal artery stenosis.

Interactions

Enhances the hypotensive effect of antihypertensive agents. Lithium, reversible increases in serum lithium concentrations and lithium toxicity have been reported during concurrent use of lithium and angiotensin-converting enzyme inhibitors. No clinically significant drug interactions have been observed in studies of azilsartan medoxomil or azilsartan with amLodipine, antacids, chlorthalidone, digoxin, fluconazole, glyburide, ketoconazole, metformin, pioglitazone and warfarin.

BISOPROLOL

Clue	Description	Indications	Route of administration and dosage
010.000.6255.00	TABLET Each tablet contains: Bisoprolol fumarate 1.25 mg Box with 30 tablets	Ischemic heart disease. Heart failure. Arterial hypertension. Heart rate control in arrhythmias.	Oral. 1.25 to 20 mg per day.
010.000.6256.00	Each tablet contains: Bisoprolol fumarate 2.5 mg Box with 30 tablets		
010.000.6257.00	Each tablet contains: Bisoprolol fumarate 5 mg Box with 30 tablets		

Generalities

It is a selective beta blocker without intrinsic sympathomimetic action.

Risk in Pregnancy

Caution must be taken in pregnancy, especially in the second and third trimesters, the data are not sufficient.
It can cause intrauterine growth restriction and neonatal adverse effects such as bradycardia and hypoglycemia. There are no known teratogenic effects. Consider alternatives in breastfeeding, there is insufficient data in humans

Adverse effects

Heart failure, severe bradycardia, atrioventricular blocks, exacerbation of angina if abruptly discontinued, myocardial infarction if abruptly discontinued, ventricular arrhythmias if abruptly discontinued, Raynaud's phenomenon, angioedema, hypersensitivity, exfoliative dermatitis, systemic lupus erythematosus, bronchospasm.

Contraindications and Precautions

Do not discontinue abruptly, hypersensitivity, advanced atrioventricular blocks, decompensated heart failure, cardiogenic shock, severe bronchospasm, acute asthma.

Interactions

Non-dihydropyridine calcium antagonists can increase the bradycardic effect. Antiarrhythmics that cause bradycardia

BUMETANIDE

Clue	Description	Indications	Route of administration and dosage
	CAPSULE OR TABLET	Associated edema Heart failure, liver cirrhosis and kidney disease, including nephrotic syndrome. Tolerated spironolactone. to	Oral. With or without food
	Each capsule or tablet contains:		Adults:
	Bumetanide 1.0 mg.		Initial: 1 mg per day and adjust according to response. Maximum dose 15mg in 24h
010.000.6260.00	Package with 20 capsules or tablets.		Usual dose: 0.5 to 3 mg per day.

Generalities

Powerful loop diuretic. Blocks the Na + K + Cl - transport system in the descending limb of the loop of Henle, increasing the excretion of Na, K and Ca

Risk in Pregnancy

b

Adverse effects

Hypokalemia, headache, dizziness or vertigo, muscle spasms or myalgia, in very rare cases hepatic edema and encephalopathy

Contraindications and Precautions

Contraindications: Hypersensitivity to bumetanide, severe electrolyte deficiency, hypovolemia or dehydration, persistent anuria, hepatic encephalopathy including coma. Caution in breastfeeding women, Severe liver failure, End-stage or progressive renal failure or with elevated creatinine or urea/blood urea nitrogen (BUN).

Regular monitoring of serum potassium concentrations, due to the risk of hypokalemia. Increased uric acid in the blood. Obstruction of the urinary tract. Diabetes, periodic determinations of glucose in blood and urine. Not recommended for children < 12 years

Interactions

Risk of hypotension with concomitant use of antihypertensives. Hypokalemia increases sensitivity to digoxin and sensitivity to non-depolarizing neuromuscular blocking agents. Increase in toxic effects of NSAIDs, aminoglycosides and cephalosporins. Increases the risk of QT prolongation and torsades de pointes from class IA and III antiarrhythmics. In concomitant use with proton pump inhibitors, monitoring magnesium levels

CANDESARTAN CILEXETIL-HYDROCHLOROTHIAZIDE

Clue	Description	Indications	Route of administration and dosage
	TABLET	Arterial hypertension systemic	Oral.
	Each tablet contains:		Adults:
	Candesartan Cilexetil 16.0 mg.		
	Hydrochlorothiazide 12.5 mg.		16.0/12.5 mg once daily.
010.000.2530.00	Package with 28 tablets.		

Generalities

Antagonist of angiotensin II receptors, AT-1 subtype with strong affinity and slow receptor dissociation.

Risk in Pregnancy

x

Adverse effects

Headache, low back pain, dizziness, respiratory tract infection, urinary tract infections, tachycardia, fatigue, abdominal pain. Pancreatitis, angioedema, leukopenia, thrombocytopenia and photosensitivity have occasionally been reported.

Contraindications and Precautions

Contraindications: Hypersensitivity to drugs or sulfonamide derivatives, pregnancy, lactation, severe kidney and liver failure, and gout.

Precautions: Mild to moderate liver and kidney disorders.

Interactions

None of clinical importance.

CARVEDILOL

Clue	Description	Indications Heart	Route of administration and dosage
	TABLET	failure.	Oral
	Each tablet contains: Carvedilol 6,250 mg.	Systemic arterial hypertension.	Adults:
010.000.2545.00	Package with 14 tablets.	Ischemic heart disease.	Initial dose 3,125 mg every 12 hours for two weeks.
	Each tablet contains: Carvedilol 25 mg.		If well tolerated, increase to 6.25 mg every 12 hours for two weeks, and if tolerance persists, maintain this dose long term.
010.000.6271.00	Package with 28 tablets.		

Generalities

Adrenergic receptor blocker with action on multiple-action ÿ1, ÿ1, ÿ2 receptors , which has a protective action on organs.

Risk in Pregnancy

c

Adverse effects

Dizziness, headache or mild fatigue, bradycardia, hypotension, syncope, dyspnea, nausea, abdominal pain, diarrhea, allergic rash, thrombocytopenia, leukopenia, hyperglycemia and hypoglycemia.

Contraindications and Precautions

Drug hypersensitivity, decompensated heart failure, overt liver failure, asthma, 2nd or 3rd degree atrioventricular block, severe bradycardia or sinus heart disease syndrome.

Interactions

Digoxin, insulin or hypoglycemic agents, rifampicin, cyclosporine, clonidine and calcium channel blockers.

CILOSTAZOLE

Clue	Description	Indications	Route of administration and dosage
	TABLET	Intermittent claudication in patients with peripheral arterial disease.	Oral.
	Each tablet contains: Cilostazol 100 mg.		Adults:
010.000.4307.00	Package with 30 tablets.	Stenosis after coronary stent placement.	100 mg every 12 hours, 30 minutes before or 2 hours after meals.

Generalities

Derived from quinolinone, with vasodilatory, antiplatelet, antithrombotic and antiproliferative effects, due to its action as a phosphodiesterase 3 inhibitor.

Risk in Pregnancy

c

Adverse effects

Headache, diarrhea, dyspepsia, flatulence and nausea.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug and chronic congestive heart failure.
Precautions: moderate to severe hepatic impairment, patients with a predisposition to bleeding or with a history of ventricular tachycardia, multifocal ventricular ectopia or atrial ectopia and ventricular or atrial fibrillation.

Interactions

Inhibitors of CYP3A4 (ketoconazole and erythromycin) or CYP2C19 (omeprazole or lanzoprazole), HIV protease inhibitors (amprenavir, indinavir, lopinavir, nelfinavir, ritonavir and saquinavir), as well as grapefruit juice increase the plasma concentration of cilostazol . Smoking reduces the action of cilostazol by 20%.

CLOPIDOGREL

Clue	Description	Indications	Route of administration and dosage
	DRAGEE OR TABLET	Hypercoagulable states.	Oral.
	Each dragee or tablet contains: Clopidogrel bisulfate or Clopidogrel bisulfate (Polymorphic form 2) equivalent to 75 mg of clopidogrel.	Prophylaxis and treatment of atherothrombotic embolisms, such as recent myocardial infarction and cerebrovascular disease.	Adults: 75 mg every 24 hours.
010.000.4246.00	Package with 14 dragees or tablets.	Established peripheral vascular disease	
010.000.4246.01	Package with 28 dragees or tablets.	Percutaneous coronary intervention.	

Generalities

ADP receptor antagonist, which irreversibly inhibits platelet aggregation.

Risk in Pregnancy

d

Adverse effects

Diarrhea, gastrointestinal bleeding, thrombocytopenia, neutropenia and rash.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, active bleeding and liver failure.
Precautions: Patients with severe kidney failure, severe liver disease and those receiving treatment with NSAIDs.

Interactions

Its adverse effects increase with oral anticoagulants, heparins and acetylsalicylic acid. Increases the adverse effects of non-steroidal analgesics.

DIAZOXIDE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Hypertensive crisis.	Slow IV.
	Each vial contains: Diazoxide 300 mg.		Adults: 1 to 3 mg/kg body weight every 5 to 15 min. Maximum dose 150 mg.
010.000.0568.00	Container with a 20 mL vial. (15 mg/mL).		Children: From 3 to 5 mg/kg body weight, it can be repeated after 30 minutes.

Generalities

Arteriolar vasodilator that activates ATP-sensitive potassium channels.

Risk in Pregnancy

c

Adverse effects

Hyperglycemia, hyperuricemia, sodium and water retention, arterial hypotension, nausea, vomiting, angina pectoris and cardiac arrhythmias.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, ischemic coronary disease, hypoglycemia, diabetes mellitus, gout.

Precautions: It should only be applied into a peripheral vein, the use of non-thiazide diuretics is recommended. In diabetes mellitus.

Interactions

Increases the effect of antihypertensives. With diuretics, the hyperglycemic and hyperuricemic effect increases: Biotransformation increases and protein binding of phenytoin decreases.

DILTIAZEM

Clue	Description	Indications	Route of administration and dosage
	TABLET OR DRAGEE	Ischemic disease coronary.	Oral.
	Each tablet contains: Diltiazem hydrochloride 30 mg.	Prinzmetal's angina.	Adults: 30 mg every 8 hours.
010.000.2112.00	Package with 30 tablets or dragees.	Arterial hypertension systemic.	

Generalities

Calcium channel blocker, reduces the concentration of calcium in cytosol and produces a decrease in cardiac activity and coronary vasodilation.

Risk in Pregnancy

c

Adverse effects

Headache, fatigue, constipation, tachycardia, hypotension, dyspnea.

Contraindications and Precautions

Contraindications: Acute myocardial infarction, pulmonary edema, atrioventricular conduction block, severe heart, kidney or liver failure.
Precautions: In the elderly and patients with mild to moderate liver failure.

Interactions

Promotes the effects of beta blockers and digitalis. With non-steroidal anti-inflammatory drugs, its hypotensive effect decreases.

DIPYRIDAMOL

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	To be used in the performing stress tests with thallium 201.	Intravenous.
	Each vial contains: Dipyridamole 10 mg.		0.142 mg/kg body weight/minute (0.567 mg/kg total weight) by infusion over 4 minutes.
010.000.0642.00	Package with 1 vials with 2 mL (5 mg/mL).		Maximum dose 0.84 mg/kg body weight per infusion over 6 to 10 minutes.
010.000.0642.01	Container with 3 vials with 2 mL (5 mg/mL).		Before administration, dilute the medication with 0.45% or 0.9% physiological sodium chloride solution or 5% glucose, with a ratio of 1:2, obtaining a total volume of approximately 20 to 50 mL.
010.000.0642.02	Container with 5 vials with 2 mL (5 mg/mL).		Inject Thallium-201 within 5 minutes after the 4-minute infusion of dipyridamole.
010.000.0642.03	Package with 10 vials with 2 mL (5 mg/mL).		

Generalities

Antiplatelet that in intravenous administration is indicated as an alternative in the examination of myocardial perfusion with Thallium-201 and stress echocardiography images, in the evaluation of coronary diseases, particularly in patients who do not have tolerance to effort.

Risk in Pregnancy

b

Adverse effects

Abdominal pain, nausea, vomiting, diarrhea, dizziness, headache, paresthesia, myalgia and edema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug or to the components of the formula.
Precautions: In patients with severe coronary disease and patients with bronchial asthma, adverse reactions related to the exercise test (stress) may occur and therefore, they should be closely monitored during the study.

Interactions

With xanthine derivatives (theophylline, tea and coffee), the vasodilatory effectiveness of dipyridamole decreases, so its consumption should be avoided 24 hours before the myocardial perfusion study (stress test). Concomitant administration with antihypertensives may increase the hypotensive effect. It antagonizes the effect of cholinesterase inhibitors, potentially aggravating myasthenia gravis.

DOBUTAMINE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Heart failure acute and chronic.	Intravenous infusion.
	Each vial or vial contains:		Adults:
	Dobutamine hydrochloride equivalent to 250 mg of dobutamine.	Cardiogenic shock.	2.5 to 10 µg/kg/minute, with gradual increases until therapeutic response is achieved.
			Children:
010.000.0615.00	Container with 5 vials with 5 mL each		2.5 to 15 µg/kg/minute. Maximum dose: 40 µg/minute.
010.000.0615.01	Container with a 20 mL vial.		Administer diluted in intravenous solutions (5% glucose or mixed) packaged in glass bottles.

Generalities

Inotrope with direct action on beta 1 adrenergic receptors. Increases contraction force and cardiac output.

Risk in Pregnancy

c

Adverse effects

Tachycardia, hypertension, anginal pain, respiratory distress, ectopic ventricular activity and nausea.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, angina and acute myocardial infarction.
Precautions: Correct hypovolemia with appropriate volume expanders. In severe valvular aortic stenosis.

Interactions

Ventricular arrhythmias are favored with general anesthetics and beta blockers antagonize their effect.

DOPAMINE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Arterial hypotension.	Intravenous infusion.
	Each vial contains: Dopamine Hydrochloride 200 mg.	State of shock.	Adults and children: 1 to 5 µg/kg body weight/minute.
		Correction of	Maximum dose 50 µg/kg body weight/minute.
010.000.0614.00	Container with 5 vials with 5 mL.	hemodynamic imbalance.	
			Administer diluted in intravenous solutions
		Acute kidney failure.	(5% glucose) packaged in glass bottles.

Generalities

Adrenergic effect due to stimulation of dopaminergic and adrenergic receptors (ÿ and ÿ) of the nervous system nice.

Risk in Pregnancy

c

Adverse effects

Nausea, vomiting, tremors, chills, hypertension, angina pectoris, tachycardia and ectopic heartbeats.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, tachyarrhythmias, pheochromocytoma and occlusive vascular disorders.

Interactions

With ergot alkaloids and monoamine oxidase inhibitors, arterial hypertension increases, with antihypertensives they decrease the hypotensive effect.

ephedrine

Clue	Description	Indications	Route of administration and dosage
040.000.2107.00	INJECTABLE SOLUTION Each vial contains: Ephedrine sulfate 50 mg. Container with 100 vials with 2 mL. (25 mg/ mL).	Arterial hypotension. Stokes syndrome Adams.	Intramuscular, subcutaneous or intravenous. Adults: Subcutaneous and intramuscular: 25 to 50 mg. Intravenous: 10 to 25 mg. Maximum dose: 150 mg/day. Children: Subcutaneous or intravenous: 3 mg/kg body weight/ day, divided into doses every 4 to 6 hours.

Generalities

Sympathomimetic with direct and indirect action on ÿ and ÿ adrenergic receptors.

Risk in Pregnancy C

Adverse effects

Insomnia, delirium, euphoria, nervousness, tachycardia, hypertension, urinary retention and dysuria.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, coronary vascular disease, cardiac arrhythmias, cerebral atherosclerosis, glaucoma, porphyria, treatment with MAO inhibitors, patients with systemic arterial hypertension, diabetes mellitus and hyperthyroidism.

Precautions: In angina pectoris, cardiac arrhythmias, high blood pressure, DM2 and DM1, pheochromocytoma and prostatic hypertrophy.

Interactions

High blood pressure can occur with antidepressants; with digitalis and halogenated anesthetics the risk of ventricular arrhythmias increases. With antihypertensives, the hypotensive effect decreases.

EPLERENONE

Clue	Description	Indications	Route of administration and dosage
010.000.6261.00	CAPSULE OR TABLET Each capsule or tablet contains: Eplerenone 25.0 mg. Package with 30 capsules or tablets.	Heart Failure with reduced Ejection Fraction (LVEF <40%), CF II and III of the NYHA, when ACEIs or ARA2 + Beta block have not been sufficient to improve symptoms and spironolactone has not been tolerated. Systemic arterial hypertension, when triple therapy has failed and spironolactone has not been tolerated.	Oral. With or without food Adults: Initial: 25 mg per day and adjust according to response. Usual dose: 25 to 50 mg per day.

Generalities

It inhibits the action of aldosterone through inhibition of the mineralocorticoid receptor.

Risk in Pregnancy b

Adverse effects

Hyperkalemia (elevated blood potassium), especially with concomitant use with ACE inhibitors or ARBs and renal failure, headache, dizziness, insomnia, abdominal distention, nausea, vomiting, diarrhea, rash (maculopapular), muscle spasms or myalgia, angioedema and agranulocytosis

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, Potassium >5.5, Creatinine clearance <30 mL/min, Shock state. Caution in people with impaired kidney function and the elderly

Interactions

The metabolism of Eplerenone is mainly through the cytochrome CYP3A pathway, so the concomitant use of drugs that strongly inhibit CYP3A (ketoconazole, itraconazole, clarithromycin, ritonavir and nelfinavir) should be considered as a precaution. In combination with ACE inhibitors or angiotensin 2 inhibitors, potassium must be monitored closely. Its effect decreases with non-steroidal anti-inflammatory drugs, or its intake with food; metal poisoning may occur concomitantly with lithium; potassium supplements increase the risk of hyperkalemia.

ESMOLOL

Clue	Description	Indications	Route of administration and dosage
010.000.5104.00	INJECTABLE SOLUTION Each vial contains: Esmolol hydrochloride 100 mg. Package with a vial with 10 mL (10 mg/ mL).	Tachycardia supraventricular.	Intravenous infusion. Adults: Initial: 500 µg/kg body weight/ minute, followed by a maintenance dose of 50 to 100 µg/kg body weight/minute. Maximum dose: 300 µg/kg body weight/minute. Administer diluted in intravenous solutions packaged in glass bottles.
010.000.5105.00	INJECTABLE SOLUTION Each vial contains: Esmolol hydrochloride 2.5 g. Container with 2 vials with 10 mL. (250 mg/mL).		

Generalities

Ultrashort-acting cardioselective ÿ1 adrenergic blocker .

Risk in Pregnancy c

Adverse effects

Hypotension, nausea, headache, drowsiness, bronchospasm.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, sinus bradycardia, major grade I heart block, heart and kidney failure.

Interactions

Increases the plasma concentration of digitalis. Opioids increase the plasma concentration of esmolol, reserpine increases bradycardia and produces hypotension.

STREPTOKINASE

Clue	Description	Indications	Route of administration and dosage
010.000.1734.00	INJECTABLE SOLUTION. Each vial with lyophilisate contains: Streptokinase 250,000 IU. Container with a vial.	Clot dissolution in: Myocardial infarction. Arterial thrombosis or venous. Pulmonary embolism.	Intravenous. Children: Initial: 1,000-5,000 IU/Kg of weight body, followed by an infusion of 400 to 1 200 IU/Kg of body weight/h. Administer diluted in intravenous solutions packaged in glass bottles.

010.000.1735.00	INJECTABLE SOLUTION. Each vial with lyophilisate contains: Natural streptokinase or recombinant streptokinase 750,000 IU. Container with a vial.		Intravenous. Adults: Initial: 250,000 IU, followed by an infusion of 100,000 IU/h for 24-72 hours. Children: Initial: 1,000-5,000 IU/kg of weight body, followed by an infusion of 400 to 1,200 IU/kg body weight/h. Administer diluted in intravenous solutions packaged in bottles of glass.
010.000.1736.00	INJECTABLE SOLUTION Each vial with lyophilisate contains: Streptokinase 1,500,000 IU. Container with a vial.		Intravenous. Adults: Arterial or venous thrombosis: Initial dose: 1,500,000 IU in 30 minutes, followed by 1,500,000 IU/h for 6 hours. Myocardial infarction: 1,500,000 IU in 60 minutes. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

It forms an activating complex that generates fibrinolysis, which hydrolyzes the fibrin in clots.

Risk in Pregnancy

c

Adverse effects

Hemorrhage, arrhythmias due to coronary vascular reperfusion, arterial hypotension and anaphylactic reactions.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, internal bleeding, surgery or intracranial neoplasia.
Precautions: Gastrointestinal bleeding, recent surgery, recent trauma, and liver or kidney damage.

Interactions

Nonsteroidal anti-inflammatory drugs may increase the antiplatelet effect of streptokinase.

FLECAINIDE

Clue	Description	Indications	Route of administration and dosage
010.000.6241.00	TABLETS Each tablet contains: flecainide acetate 100 mg. Bottle of 100 tablets.	Antiarrhythmics	Oral. 100 mg every 12 hours

Generalities

Inhibitor of fast sodium channels, it decreases the peak of the action potential, which induces a decrease in the speed in phase 0 of cardiomyocyte depolarization.

Risk in Pregnancy

C (contraindicated in pregnancy)

Adverse effects

Vertigo, visual disturbances, lightheadedness

Contraindications and Precautions

Contraindicated in recent acute myocardial infarction and in patients with heart failure as it increases the mortality rate. Do not use with amiodarone, quinidine, calcium channel blockers. Caution with DCr less than 35 mL/min.

Interactions

Due to its negative inotropic effect with beta blockers, there is an additive effect. Its plasma concentration decreases with phenytoin, phenobarbital and carbamazepine. Increases the risk of ventricular arrhythmias with mizolastine, terfenadine, rifonavir, loponavir and indinavir

IBUPROFENE

Clue	Description	Indications Root	Route of administration and dosage
010.000.6076.00	INJECTABLE SOLUTION Each vial contains: Ibuprofen 10 mg Container with 4 vials of 2 mL (10 mg/2 mL).	canal treatment hemodynamically significant patent arteriosus.	Intravenous. Premature newborns less than 34 weeks gestational age. Therapy cycle: three intravenous injections of Ibuprofen administered at 24-hour intervals. The first injection should be administered after the first 6 hours of life. The ibuprofen dose is adjusted according to body weight as follows: 1st injection: 10 mg/kg body weight. 2nd and 3rd injection: 5 mg/kg. of body weight.

Generalities

Ibuprofen is an NSAID that has anti-inflammatory, analgesic and antipyretic activity. Ibuprofen is a racemic mixture of S(+) and R(-) enantiomers. In vivo and in vitro studies indicate that the S(+) isomer is responsible for clinical activity. Ibuprofen is a non-selective cyclooxygenase inhibitor, producing a reduction in prostaglandin synthesis. Since prostaglandins are involved in the persistence of the ductus arteriosus after birth, this effect is believed to be the primary mechanism of action of ibuprofen in this indication.

Risk in Pregnancy — not applicable

Adverse effects

Thrombocytopenia, Neutropenia, bronchopulmonary dysplasia, intraventricular hemorrhage, periventricular leukomalacia, Pulmonary hemorrhage, necrotizing enterocolitis

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, patients on hemodialysis, patients with severe renal failure, patients with moderate to severe liver failure or hepatobiliary obstruction, genetic deficiency of galactose or lactose, coadministration with renin inhibitors.

Precautions: double blockade of the renin-angiotensin system, hyperkalemia, renovascular hypertension, hypotension, electrolyte imbalance, allergy to tartrazine, mitral or aortic valve stenosis, primary hyperaldosteronism.

Interactions

Chlorhexidine should not be used to disinfect the neck of the blister because it is not compatible with the Ibuprofen solution. Therefore, to perform asepsis on the ampoule before use, it is recommended to use 60% ethanol or 70% isopropyl alcohol. In order to avoid any interaction with the Ibuprofen solution during disinfection of the neck of the ampoule with an antiseptic, the ampoule must be completely dry before opening. This medication should not be mixed with other medications except with sodium chloride 9 mg/mL (0.9%) injection solution or glucose 50 mg/mL (5%) solution. In order to avoid any substantial variation in pH due to the presence of acidic medications that may remain in the infusion line, the line should be rinsed before and after administration of Ibuprofen with 1.5 to 2 mL of chloride injection solution. sodium 9 mg/mL (0.9%) or glucose 50 mg/mL (5%).

IRBESARTAN

Clue	Description	Indications	Route of administration and dosage
	TABLET Each tablet contains: Irbesartan 150 mg.	Systemic arterial hypertension.	Oral. Adults:

010.000.4095.00	Container with 28 tablets.		150-300 mg once a day.

Generalities

Non-peptide antagonist of angiotensin II receptors, AT1 subtype.

Risk in Pregnancy x

Adverse effects

Fatigue, edema, nausea, vomiting, dizziness, headache.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, pregnancy and lactation.
Precautions: Hypertensive patients with renal artery stenosis of one or both kidneys or patients with severe congestive heart failure.

Interactions

Simultaneous administration of potassium-sparing diuretics, potassium supplements, or potassium-containing salt substitutes may cause increased serum potassium.

IRBESARTAN/ AMLODIPINE

Clue	Description	Indications	Route of administration and dosage
010.000.5801.00	TABLET Each tablet contains: Irbesartan 150 mg. amLodipine besylate equivalent to 5 mg by amLodipino Package with 28 tablets.	Treatment of hypertension essential arterial blood pressure in adult patients with chronic renal failure and macroalbuminuria whose blood pressure has not been adequately controlled with monotherapy.	Oral. One tablet every 24 hours. It can be administered with or without food.
010.000.5802.00	Each tablet contains: Irbesartan 300 mg. amLodipine besylate equivalent to 5 mg by amLodipino Package with 28 tablets.		
010.000.6268.00	Each tablet contains: Irbesartan 150 mg. amLodipine besylate equivalent to 10 mg by amLodipino Package with 28 tablets.		
010.000.6269.00	Each tablet contains: Irbesartan 300 mg. amLodipine besylate equivalent to 10 mg by amLodipino Package with 28 tablets.		

Generalities

Fixed dose combination of Irbesartan/amLodipine besilate tablets for the treatment of Arterial Hypertension.
Fixed-dose combinations are single tablets formulated with two or more different medications. These formulations have been used more frequently in pain, high blood pressure and diabetes, offering the following advantages: simplicity and convenience of use, simple titration, better adherence with the possibility of promoting the effectiveness and control of chronic diseases as well as the reduction of adverse effects through the complementary action of medications.

Risk in Pregnancy x

Adverse effects

Dizziness, headache, orthostatic dizziness, tachycardia, cough, nausea/vomiting, diarrhea, dyspepsia/heartburn, sexual dysfunction, fatigue, edema, chest pain.

Contraindications and Precautions

Due to the presence of both Irbesartan and amLodipine, it is contraindicated in: hypersensitivity to either the active substances or any component of the formulation, hypersensitivity to dihydropyridines, cardiogenic shock, clinically significant aortic stenosis, unstable angina (excluding Prinzmetal's angina).

Interactions

For the combination Irbesartan and AmLodipine: Based on a pharmacokinetic study where irbesartan and amLodipine were administered alone or in combination, there is no pharmacokinetic interaction between irbesartan and amLodipine.

Irbesartan: Based on in vitro data, interactions are not expected to occur with drugs whose metabolism is dependent on the cytochrome isoenzymes CYP1A1, CYP1A2, CYP2A6, CYP2B6, CYP2B6, CYP2D6, CYP2E1 or CYP3A4. Irbesartan is primarily metabolized by CYP2C9; however, during clinical interaction studies, no significant interactions were observed when irbesartan was administered concomitantly with warfarin (a drug metabolized by CYP2C9). The pharmacokinetics of irbesartan are not affected by concomitant administration of nifedipine or hydrochlorothiazide. Irbesartan does not affect the pharmacokinetics of simvastatin (metabolized by CYP3A4) or digoxin (efflux transporter P-glycoprotein substrate). Based on experience with the use of other medications that affect the renin-angiotensin system, administration of potassium-sparing diuretics, potassium supplements, or potassium-containing salt substitutes may cause an increase in serum potassium.

AmLodipine: It has been safely administered concomitantly with thiazide diuretics, beta-blockers, alpha-blockers, angiotensin-converting enzyme inhibitors, long-acting nitrates, sublingual glyceryl trinitrate, non-steroidal anti-inflammatory drugs, antibiotics and oral hypoglycemics. Data obtained from in vitro studies with human plasma demonstrate that amLodipine has no effect on protein binding with the drugs studied (digoxin, phenytoin, warfarin or indomethacin).

Cimetadine: Coadministration of amLodipine with cimetidine did not alter the pharmacokinetics of amLodipine.
Grapefruit Juice: Simultaneous administration of 240 mL of grapefruit juice with a single oral dose of 10 mg of amLodipine in 20 healthy volunteers had no significant effect on the pharmacokinetics of amLodipine.
Aluminum/Magnesium (antacid): Simultaneous administration of an aluminum/magnesium antacid with a single dose of amLodipine had no significant effect on the pharmacokinetics of amLodipine.
Sildenafil: When amLodipine and sildenafil were used in combination, each agent independently exerted its own blood pressure reducing effect.
Atorvastatin: Simultaneous administration of multiple doses of 10 mg amLodipine with 80 mg atorvastatin resulted in no significant change in the steady state pharmacokinetic parameters of atorvastatin.
Digoxin: Simultaneous administration of amLodipine with digoxin did not modify serum digoxin concentrations or its renal clearance in healthy volunteers.
Warfarin: simultaneous administration of amLodipine did not significantly modify the effect of warfarin on the prothrombin time.
Ciclosporine: pharmacokinetic studies with cyclosporine have shown that amLodipine does not significantly modify its pharmacokinetics.

IRBESARTAN/ HYDROCHLOROTHIAZIDE

Clue	Description	Arterial **indications**	Route of administration and dosage
	TABLET	Systemic hypertension.	Oral.
	Each tablet contains:		Adults:
	Irbesartan 150 mg. Hydrochlorothiazide 12.5 mg.		150 mg-12.5 mg or 300 mg-12.5 mg or
010.000.4097.00	Package with 28 tablets.		300 mg- 25 mg once a day.
	Each tablet contains:		
	Irbesartan 300 mg. Hydrochlorothiazide 12.5 mg.		
010.000.4098.00	Package with 28 tablets.		

Generalities

Non-peptide antagonist of angiotensin II receptors, subtype AT1 in combination with a thiazide diuretic.

Risk in Pregnancy x

Adverse effects

Fatigue, weakness, edema, nausea, vomiting, dizziness, headache, sexual dysfunction and abnormal uresis.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, pregnancy and lactation.
Precautions: patients with severe kidney and liver disease.

Interactions

Simultaneous administration of potassium-sparing diuretics, potassium supplements, or potassium-containing salt substitutes may cause increased serum potassium. Alcohol, barbiturates and narcotics potentiate the action of hydrochlorothiazide, it may be necessary to adjust the doses of antidiabetic medications.

ISOSORBIDE, DINITRATE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each mL contains: Isosorbide dinitrate 1 mg.	Angina pectoris. Chronic ischemic heart disease.	Intravenous infusion. Adults:
010.000.4118.00	Container with 100 mL (1 mg/1 mL).	Heart failure.	From 2 to 7 mg/hour, until the therapeutic response is obtained. Maximum dose 10 mg/hour.
010.000.4118.01	Container with 10 apollets with 10 mL (10 mg/ 10 mL).		Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Nitrate that reduces the requirement and increases the supply of oxygen to the myocardium. Vasodilation increases coronary flow.

Risk in Pregnancy C

Adverse effects

Tachycardia, arrhythmias, angina, dizziness, hypotension, headache, restlessness, vomiting and nausea.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, arterial hypotension, glaucoma, anemia, head trauma, and liver or kidney dysfunction.

Interactions

With antihypertensives, opiates and ethyl alcohol, hypotension increases. Adrenergic medications decrease its antianginal effect.

ISOSORBIDE, MONONITRATE

Clue	Description	Indications	Route of administration and dosage
	TABLET Each tablet contains: Isosorbide 5-mononitrate 20 mg.	Angina pectoris. Myocardial infarction. Arterial hypertension systemic.	Oral. Adults: Take 20 or 40 mg every 8 hours.
010.000.4120.00	Package with 20 tablets.	Congestive heart failure.	Start with low doses and do not exceed 80 mg per day.

Generalities

Nitrate that increases the supply and decreases cardiac oxygen demand, by reducing cardiac preload and peripheral resistance.

Risk in Pregnancy C

Adverse effects

Headache, vertigo, nausea, vomiting, arterial hypotension and tachycardia.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, states of low cardiac output, hypovolemia and arterial hypotension.

Precautions: Do not drive vehicles or heavy machinery.

Interactions

Increases the effect of antihypertensive medications.

IVABRADINE

Clue	Description	Indications	Route of administration and dosage
010.000.6071.00	COMPRESSED Each tablet contains: Ivabradine 5 mg equivalent to 5,390 mg of hydrochloride Ivabradine Package with 56 tablets.	Chronic heart failure as an adjunct to basic treatment, not first-line or monotherapy with systolic dysfunction, NYHA class II to IV, in patients with sinus rhythm and whose heart rate is greater than or equal to 75 bpm, in combination with background therapy, particularly with beta-blockers at optimal doses or when beta-blockers are contraindicated or not tolerated.	Oral. Adults and people over 18 years of age: Initial dose of 5 mg twice daily: After two weeks increase to 7.5 mg twice a day depending on therapeutic response.
010.000.6072.00	COMPRESSED Each tablet contains: Ivabradine 7.5 mg equivalent to 8,085 mg of hydrochloride Ivabradine Package with 56 tablets.		

Generalities

Ivabradine is a drug that exclusively reduces heart rate, acting by selectively inhibiting the cardiac pacemaker current that controls spontaneous diastolic depolarization in the sinus node and regulates heart rate. The cardiac effects are specific to the sinus node with no effect on intraatrial, atrioventricular or intraventricular conduction times, nor on myocardial contractility or ventricular repolarization.

Risk in Pregnancy x

Adverse effects

Light phenomena (phosphenes), blurred vision, headache, bradycardia, first degree AV block (prolongation of the PQ interval on the ECG), uncontrolled blood pressure.

Contraindications and Precautions

Hypersensitivity to ivabradine or any of the excipients, resting HR less than 70 bpm before treatment, cardiogenic shock, acute myocardial infarction, severe hypotension (< 90/50 mmHg), severe liver failure, sinus node disease, sinoatrial block , acute or unstable heart failure, pacemaker dependence, unstable angina, third degree AV block, concomitant use with potent cytochrome P450 3A4 3A4 inhibitors such as azole antifungals (ketoconazole, itraconazole), macrolide antibiotics (clarithromycin, oral erythromycin, josamycin, telithromycin), HIV protease inhibitors (nelfinavir, ritonavir) and nefazodone, concomitant treatment with verapamil or diltiazem, pregnancy and lactation.

Interactions

Medications that prolong the QT interval (quinidine, disopyramide, beppridil, sotalol, ibutilide, amiodarone, pimozide, ziprasidone, sertindole, mefloquine, halofantrine, pentamidine, cisapride, erythromycin, intravenous). CYP3A4 inhibitors such as azole antifungals (ketoconazole, itraconazole), macrolide antibiotics (clarithromycin, oral erythromycin, josamycin, telithromycin), HIV protease inhibitors (nelfinavir, ritonavir). Heart rate-lowering drugs diltiazem or verapamil.

LABETALOL

Clue	Description	Indications	Route of administration and dosage
010.000.6259.00	Injectable solution. Each vial contains: Labetalol 100 mg/20 mL Box with a vial	Hypertensive emergency. Hypertensive emergency of pregnancy.	Intravenous. 40-80 mgs IV every 10 minutes. Start with 20 mg IV, maximum dose of 300 mg. Infusion of 1-2 mg/min IV

Generalities

It is an alpha and beta adrenergic receptor blocker.

Risk in Pregnancy

Caution must be taken in pregnancy, especially in the second and third trimesters, the data are not sufficient.
It can cause intrauterine growth restriction and neonatal adverse effects such as bradycardia and hypoglycemia. There are no known teratogenic effects. Consider alternatives in breastfeeding, there is insufficient data in humans

Adverse effects

Heart failure, severe bradycardia, atrioventricular blocks, exacerbation of angina if abruptly discontinued, myocardial infarction if abruptly discontinued, ventricular arrhythmias if abruptly discontinued, Raynaud's phenomenon, hypersensitivity, systemic lupus erythematosus, bronchospasm

Contraindications and Precautions

Hypersensitivity, bradycardia, atrioventricular blocks, decompensated heart failure, cardiogenic shock, bronchospasm.

Interactions

Non-dihydropyridine calcium antagonists. Antiarrhythmics that cause bradycardia.

LEVOSIMENDAN

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Congestive heart failure serious.	Intravenous (central or peripheral infusion).
	Each mL contains: Levosimendan 2.5 mg.		Adults: Loading dose: 12 ÿg/kg body weight for 10 minutes.
010.000.5097.00	Container with 1 vial with 5 mL.		Maintenance dose: 0.05 – 0.2 ÿg/kg body weight, according to response, for 24 hours.
010.000.5097.01	Container with 1 vial with 10 mL.		Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Increases the contractility of the heart by increasing the sensitivity of the heart muscle to calcium.

Risk in Pregnancy

c

Adverse effects

Headache, hypotension, extrasystoles, atrial fibrillationv and ventricular tachycardia.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, mechanical obstruction that affects ventricular filling.
Precautions: Kidney failure, children and adolescents.

Interactions

It can be administered simultaneously with furosemide, digoxin and nitroglycerin.

LIDOCAINE

Clue	Description	Indications	Route of administration and dosage
	1% INJECTABLE SOLUTION	Extrasystoles ventricular.	Intravenous.
	Each vial contains: Lidocaine hydrochloride 500 mg.	Ventricular fibrillation .	Adults: Antiarrhythmic: 1 to 1.5 mg/kg body weight/dose administered slowly.
010.000.0261.00	Package with 5 50 mL vials.	Ventricular tachycardia.	Maintenance: 1 to 4 mg/minute.
		Ventricular ectopia caused by hypotension.	Administer diluted in solutions IVs packaged in glass bottles.

Generalities

Sodium channel blocker. Class 1B antiarrhythmic that reduces depolarization, the automaticity of the ventricles in the diastolic phase.

Risk in Pregnancy b

Adverse effects

Hypotension, agitation, drowsiness, blurred vision, tremor, seizures, nausea, paleness, sweating and respiratory depression.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, atrioventricular block.

Interactions

With antiarrhythmics it can produce additive cardiac effects. With anticonvulsants from the hydantoin group, it has depressive effects on the heart and lidocaine is metabolized more quickly. With beta-adrenergic blockers, the toxicity of lidocaine may increase. With cimetidine it can cause an increase in lidocaine in the blood. Neuromuscular blockers may have their effect enhanced with the simultaneous use of lidocaine. Epinephrine can potentiate the effect of medications that increase cardiac excitability.

LOSARTAN

Clue	Description	Indications	Route of administration and dosage
010.000.2520.00	DRAGEE OR TABLET COVERED Each dragee or coated tablet contains: Losartan potassium 50 mg. Package with 30 coated tablets or dragees.	Systemic arterial hypertension.	Oral. Adults: 50 mg every 24 hours.

Generalities

Non-peptide antagonist of angiotensin II receptors, AT1 subtype that blocks vasoconstriction and the effects of aldosterone.

Risk in Pregnancy d

Adverse effects

Occasional vertigo, orthostatic hypotension, and rash.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug.
Precautions: Breastfeeding.

Interactions

Phenobarbital and cimetidine favor its biotransformation.

LOSARTAN AND HYDROCHLOROTHIAZIDE

Clue	Description	Indications High	Route of administration and dosage
010.000.2521.00	DRAGEE OR TABLET COVERED Each tablet or coated tablet contains: Losartan potassium 50.0 mg. Hydrochlorothiazide 12.5 mg. Package with 30 coated tablets or dragees.	blood pressure systemic.	Oral. Adults: One dragee every 24 hours.

Generalities

Combination of a non-peptide antagonist of Angiotensin II receptors, subtype AT1 and a thiazide diuretic.

Risk in Pregnancy x

Adverse effects

Anaphylactic reactions, angioneurotic edema, glottis edema, diarrhea, rarely hepatitis, presence of dry cough and arterial hypotension.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug and other sulfonamide medications and anuria.
Precautions: Kidney or liver failure.

Interactions

Rifampicin and fluconazole reduce their active metabolite, barbiturates or narcotics can accentuate orthostatic hypotension, it may be necessary to adjust the dose of antidiabetic medications, their association with other antihypertensives has a synergistic action.

METHYLDOPA

Clue	Description	**Indications** High	Route of administration and dosage
010.000.0566.00	TABLET Each tablet contains: Methyldopa 250 mg. Package with 30 tablets.	blood pressure in pregnancy. As an alternative to spironolactone in resistant hypertension.	Oral. Adults: 250 mg to 1 g/day, in one to three doses a day. Children: 10 to 40 mg/kg body weight/day, in three doses. Maximum dose: 65 mg/day.

Generalities

Central antagonist prodrug of alpha two adrenergic receptors.

Risk in Pregnancy

b

Adverse effects

Sedation, orthostatic hypotension, dry mouth, dizziness, depression, edema, sodium retention, gynecomastia, galactorrhea, decreased libido and impotence.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, chromaffin tumors, acute hepatitis, liver cirrhosis, renal failure and with MAOIs
Precautions: Pregnancy and lactation.

Interactions

With adrenergics, antipsychotics, antidepressants and amphetamines, it can cause a hypertensive effect.

MILRINONE

Clue	Description	**Indications** Heart	Route of administration and dosage
010.000.5100.00	INJECTABLE SOLUTION Each vial contains: Milrinone lactate equivalent to 20 mg milrinone. Container with a vial bottle with 20 mL (1 mg/1 mL).	failure congestive and acute post-heart surgery.	Intravenous. Adults: Initial: 50 µg/kg in 10 minutes. Maintenance: 0.500 µg/kg/minute infusion; do not exceed 1.13 mg/kg/minute. Administer diluted in intravenous solutions packaged in glass bottles.
010.000.5100.01	INJECTABLE SOLUTION Each vial or vial contains: Milrinone lactate equivalent to 10 mg milrinone. Package with three vials or vials with 10 mL each (1 mg/1 mL).		

Generalities

Selective inhibitor of cyclic AMP phosphodiesterase in cardiac and vascular muscle, with positive inotropic effect, direct vasodilatory action and with minimal chronotropic effect.

Risk in Pregnancy c

Adverse effects

Supra and ventricular arrhythmias, arterial hypotension, chest pain, headache, shortening of the conduction time of the atrioventricular node.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, severe obstructive valvular disease and breastfeeding,
Precautions: Do not dilute in sodium bicarbonate solutions, requires dose adjustment in case of renal failure, in association with diuretics.

Interactions

It is precipitated when furosemide and bumetanide are administered in the same tube.

NESIRITIDE

Clue	Description	Indications	Route of administration and dosage
010.000.4200.00	INJECTABLE SOLUTION Each vial with lyophilisate contains: Nesiritide citrate at 1.58 mg nesiritide. Container with a vial.	Heart failure decompensated congestive Acute lung edema.	Intravenous. Adults and people over 18 years of age, with systolic blood pressure greater than 110 mm Hg and creatinine less than 1.7 mg/dL: Bolus of 2 ÿg/kg body weight, followed by a continuous infusion of 0.01 ÿg/kg body weight body/minute. The initial dose should not be more than 2 ÿg/kg body weight. Exclusive use in coronary units and intensive care units of highly specialized hospitals.

Generalities

Human B-type natriuretic peptide (hBNP) acts on the cardiorenal axis, exerting its effects on the vascular system, heart and kidneys.

Risk in Pregnancy d

Adverse effects

Symptomatic or asymptomatic hypotension, ventricular tachycardia, ventricular extrasystoles, angina pectoris, bradycardia, headache, abdominal pain, back pain, insomnia, dizziness, anxiety, nausea and vomiting.

Contraindications and Precautions

Contraindications: hypersensitivity to the drug.
Precautions: Neseritide should not be used as first-line therapy in patients with cardiogenic shock or in patients with systolic blood pressure ÿ 90 mm Hg.

Interactions

Increased symptomatic hypotension in patients receiving angiotensin-converting enzyme inhibitors.

SODIUM NITROPRUSSIDE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each vial with powder or solution contains: Sodium nitroprusside 50 mg.	Hypertensive crisis. Malignant arterial hypertension.	Intravenous infusion. Adults and children: 0.25 to 1.5 µg/kg body weight/min, until therapeutic response is obtained.

010.000.0569.00	Container with a vial with or without diluent.	Left ventricular failure.	In exceptional cases, the dose can be increased to 10 µg/kg body weight/minute. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Vasodilator that produces a decrease in pre- and afterload, leading to an increase in cardiac output.

Risk in Pregnancy d

Adverse effects

Sweating, nausea, lassitude, headache. Thiocyanate poisoning (toxic metabolite) produces psychosis and seizures.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, arterial hypotension, hypothyroidism, liver and kidney dysfunction.
Precautions: Do not administer for more than 24 to 48 hours, as thiocynate poisoning is encouraged.

Interactions

With antihypertensives, its hypotensive effect increases.

NOREPINEPHRINE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION	Arterial hypotension.	Intravenous infusion.
	Each vial contains: Norepinephrine bitartrate equivalent to 4 mg of norepinephrine.		Adults and children: 16 to 24 µg/minute, adjust the dose and drip according to therapeutic response.
010.000.0612.00	Container with 50 4 mL vials.		Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Adrenergic neurotransmitter that increases blood pressure by increasing peripheral vascular resistance.

Risk in Pregnancy c

Adverse effects

Headache, tachycardia, anxiety, dyspnea, reflex bradycardia, hypertension and phlebitis.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, advanced shock, hyperthyroidism, coronary insufficiency, high blood pressure and diabetes.

Interactions

With tricyclic antidepressants its hypertensive effects increase.

OLMESARTAN/ HYDROCHLOROTHIAZIDE

Clue	Description	Indications	Route of administration and dosage
	TABLET	Initial treatment of the arterial Systemic hypertension.	Oral.
	Each tablet contains: Olmesartan medoxomil 20 mg. Hydrochlorothiazide 12.5 mg.		Adults: 20mg – 12.5 mg, 40 mg – 12.5 mg or 40 mg – 25 mg once a day.
010.000.6249.00	Container with 28 tablets		
	Each tablet contains: Olmesartan medoxomil 40 mg.		

	Hydrochlorothiazide 12.5 mg. Package with 28 tablets.		
010.000.6250.00			

Generalities

Non-peptide antagonist of angiotensin II receptors, AT1 subtype in combination with a thiazide diuretic.

Risk in Pregnancy

X (contraindicated in pregnancy)

Adverse effects

Fatigue, weakness, edema, nausea, vomiting, dizziness, headache, sexual dysfunction and abnormal uresis.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, pregnancy and lactation. Precautions: patients with severe kidney and liver disease.

Interactions

Simultaneous administration of potassium-sparing diuretics, potassium supplements, or potassium-containing salt substitutes may cause increased serum potassium. Alcohol, barbiturates and narcotics potentiate the action of hydrochlorothiazide, it may be necessary to adjust the doses of antidiabetic medications

PENTOXYFYLLINE

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each vial contains: Pentoxifylline 300 mg.	Intermittent claudication. Vascular insufficiency. Insufficiency cerebrovascular.	Intravenous infusion. Adults: 300 mg every 12 hours, do not exceed 1200 mg/day.
010.000.4122.01	Container with 5 vials with 15 mL.		Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Methylxanthine derivative that reduces blood viscosity and gives flexibility to the erythrocyte, thereby improving capillary blood flow.

Risk in Pregnancy

c

Adverse effects

Headache, dizziness, nausea, vomiting and gastrointestinal pain.

Contraindications and Precautions

Contraindications: Hypersensitivity to caffeine, theophylline and theobromine, cerebral hemorrhage and breastfeeding.
Precautions: In cardiac arrhythmias, arterial hypotension, myocardial infarction and renal failure.

Interactions

Increases the effect of antihypertensives, anticoagulants and insulin.

PERINDOPRIL/ AMLODIPINE

Clue	Description	Indications	Route of administration and dosage
	TABLETS Each tablet contains: Perindopril arginine 5 mg. AmLodipine 5 mg.	Systemic hypertension treatment. of the arterial	Oral. One tablet once a day in a single dose, preferably in the morning before breakfast.
010.000.6231.00	Bottle with 30 tablets. Each tablet contains: Perindopril arginine 10 mg. AmLodipine 5 mg.		

010.000.6233.00 Bottle with 30 tablets.			

Generalities

Perindopril. They inhibit the angiotensin-converting enzyme, preventing the formation of angiotensin II from angiotensin I, through its active metabolite perindoprilat. AmLodipine: Calcium channel blocker that inhibits calcium entry into cardiac and vascular smooth muscle cells.

Risk in Pregnancy

X (Contraindicated in pregnancy)

Adverse effects

Perindopril. Cough, headache, mood disorders, drowsiness, asthenia, digestive disorders, vertigo, cramps, localized skin rashes and acute gout attacks. AmLodipine. Headache, fatigue, nausea, asthenia, drowsiness, edema, palpitations and dizziness.

Contraindications and Precautions

Perindopril. Contraindications: perindopril is contraindicated in children. Precautions: it should be administered with caution in patients with mitral stenosis and left ventricular outflow obstruction; administer with caution in patients who will undergo major surgery or anesthesia with drugs that induce hypotension.

AmLodipine. Contraindications: Hypersensitivity to the drug, the elderly, liver damage and deficiency of myocardial perfusion.

Interactions

Perindopril. It should not be associated with potassium salts and/or potassium-sparing diuretics, due to the risk of hyperkalemia. The association with diuretics, neuroleptics and antidepressants derived from Imipramine should be considered. AmLodipine. With antihypertensives, their hypotensive effect increases

PERINDOPRIL / AMLODIPINE / INDAPAMIDE

Clue	**Description**	Arterial **indications**	**Route of administration and dosage**
010.000.6237.00	TABLETS Each tablet contains: Perindopril arginine 5 mg. amLodipine besylate 5 mg. Indapamide 1.25 mg. Box with 30 tablets.	Systemic hypertension.	Oral. One tablet, taken once in the morning before breakfast. The association with fixed doses is not suitable for initial treatment.
010.000.6240.00	Each tablet contains: Perindopril arginine 10 mg. amLodipine besylate 10 mg. Indapamide 2.5 mg. Box with 30 tablets.		

Generalities

Perindopril: Inhibits the angiotensin-converting enzyme, preventing the formation of angiotensin II from angiotensin I, through its active metabolite perindoprilat. Indapamide: Thiazide diuretic that inhibits sodium reabsorption in the cortical segment. AmLodipine: Calcium channel blocker that inhibits calcium entry into cardiac and vascular smooth muscle cells.

Risk in Pregnancy

X (Contraindicated in pregnancy)

Adverse effects

Perindopril. Cough, headache, mood disorders, drowsiness, asthenia, digestive disorders, vertigo, cramps, localized skin rashes and acute gout attacks. Indapamide. Syncope, vomiting, altered liver function tests, skin hypersensitivity reactions, maculopapular rashes, hypokalemia.
AmLodipine. Headache, fatigue, nausea, asthenia, drowsiness, edema, palpitations and dizziness.

Contraindications and Precautions

Perindopril. Contraindications: perindopril is contraindicated in children. Precautions: it should be administered with caution in patients with mitral stenosis and left ventricular outflow obstruction; administer with caution in patients who will undergo major surgery or anesthesia with drugs that induce hypotension. Indapamide. Use with caution in patients with liver conditions, photosensitivity reactions, lactose intolerance, with hydroelectrolyte alterations. AmLodipine. Contraindications: Hypersensitivity to the drug, the elderly, liver damage and deficiency of myocardial perfusion.

Interactions

Perindopril. It should not be associated with potassium salts and/or potassium-sparing diuretics, due to the risk of hyperkalemia. The association with diuretics, neuroleptics and antidepressants derived from Imipramine should be considered. Indapamide. Lithium, the association with class Ia and III antiarrhythmics and antipsychotics can induce torsade de pointes; the association with NSAIDs can reduce the antihypertensive effect; The association with ACE inhibitors can induce hypotension and/or acute renal failure. AmLodipine. With antihypertensives, their hypotensive effect increases

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010.000.6235.00	TABLETS Each tablet contains: Perindopril arginine 5 mg. Indapamide 1.25 mg. Box with 30 tablets.	Systemic hypertension treatment.	Oral. One tablet once a day. Take in the morning before breakfast.
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Generalities

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PRAZOSIN

Clue	Description	Indications	Route of administration and dosage
	CAPSULE OR TABLET Each capsule or tablet contains:	Arterial hypertension. Heart failure.	Oral. Adults: Initial: 0.5 to 1 mg every 8 or 12 hours.

010.000.0573.00	Prazosin hydrochloride equivalent to 1 mg of prazosin. Package with 30 capsules or tablets.		Support: 6 to 15 mg/day, divided into 2 to 3 doses, adjust according to therapeutic response. Maximum dose: 20 mg/day. Children: 25 to 40 µg/kg of body weight every 6 hours, adjust according to therapeutic response.

Generalities

Blocker Alpha1 adrenergic antagonist, which decreases peripheral vascular resistance.

Risk in Pregnancy C

Adverse effects

Postural hypotension, dizziness, lipothymia, syncope, headache, asthenia, palpitations, nausea, tachycardia, drowsiness and weakness.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, coronary insufficiency, heart failure, kidney failure and the elderly.

Precautions: Raynaud's syndrome, prostatic hyperplasia and orthostatic hypotension.

Interactions

With antihypertensives and diuretics, the hypotensive effects increase.

PROPAPHENONE

Clue	Description	Indications	Route of administration and dosage
010.000.0537.00	TABLET Each tablet contains: Propafenone Hydrochloride 150 mg. Package with 20 tablets.	Ventricular extrasystoles. Ventricular tachycardia. Ventricular fibrillation.	Oral. Adults: Impregnation: 150 mg every 6 to 8 hours for 7 days. Maintenance: 150 to 300 mg every 8 hours.

Generalities

It blocks the influx of sodium into the cardiac cell, decreasing the automaticity and speed of cardiac conduction.

Risk in Pregnancy C

Adverse effects

Anorexia, nausea, dizziness, blurred vision, hypotension and atrioventricular block.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, atrioventricular block, heart failure and severe pulmonary obstruction.

Interactions

Increases plasma levels of digitalis, warfarin and beta blockers.

QUINIDINE

Clue	Description	Indications	Route of administration and dosage
010.000.0527.00	TABLET Each tablet contains: Quinidine sulfate 200 mg. Package with 20 tablets.	Atrial fibrillation or flutter. Paroxysmal supraventricular tachycardia. Ventricular and atrial extrasystole.	Oral. Adults: 200 to 400 mg every 4 to 6 hours. Children: 25 mg/kg body weight/day, divided every 8 hours for 10 days.

Generalities

Sodium channel blocker that reduces the speed of depolarization and conduction.

Risk in Pregnancy c

Adverse effects

Dry mouth, nausea, constipation, urinary retention, erythema, blurred vision, myocardial depression, hypotension and cinchonism.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, myocardial damage, atrioventricular block, heart, liver or kidney failure, shock and glaucoma.

Interactions

Phenobarbital and phenytoin promote its biotransformation. Increases the effect of oral and digitalis anticoagulants by decreasing their elimination.

SACUBITRIL VALSARTAN

Clue	Description	**Indications** Heart	Route of administration and dosage
010.000.6112.00	COMPRESSED Each tablet contains: Sacubitril valsartan sodium hydrate equivalent to 50 mg of Sacubitril valsartan Package with 30 tablets.	failure (Class NYHA function II-IV) in patients with systolic dysfunction and left ventricular ejection fraction (LVEF) ÿ35%, with elevated natriuretic peptide and failure to previous treatment.	Oral. Adults: 200 mg twice a day. A starting dose of 100 mg twice a day is recommended. The dose will be doubled every 2-4 weeks until reaching the planned dose of 200 mg twice a day. Maximum recommended dose 400 mg/day.
010.000.6113.00	COMPRESSED Each tablet contains: Sacubitril valsartan sodium hydrate equivalent to 100 mg of Sacubitril valsartan Container with 60 tablets.		
010.000.6114.00	COMPRESSED Each tablet contains: Sacubitril valsartan sodium hydrate equivalent to 200 mg of Sacubitril valsartan Container with 60 tablets.		

Generalities

Sacubitrile Valsartan is an inhibitor of neprilysin and the angiotensin receptor. It acts by inhibiting neprilysin through LBQ657, which is the active metabolite of the prodrug Sacubitril, and simultaneously antagonizing the angiotensin II type 1 (AT1) receptor, through Valsartan. The complementary renal effects and cardiovascular benefits of Sacubitril Valsartan in patients with heart failure are attributed to the increase in concentrations of peptides that are degraded by neprilysin, such as natriuretic peptides, and to the simultaneous inhibition of the deleterious effects of angiotensin II. Natriuretic peptides exert their effects by activating receptors present on cell membranes that are coupled to a guanylyl cyclase, resulting in increased concentrations of the second messenger, cyclic guanosine monophosphate (cGMP), which promotes vasodilation, natriuresis and diuresis, increased glomerular filtration and renal blood flow, inhibition of renin and aldosterone release, reduction of sympathetic activity, as well as antihypertrophic and antifibrotic effects. Sustained activation of the renin-angiotensin-aldosterone system causes vasoconstriction, renal sodium and fluid retention, activation of cell development and proliferation, and, as a consequence, maladaptive cardiovascular remodeling. Valsartan inhibits the detrimental effects of angiotensin II on the cardiovascular and renal systems by selectively antagonizing the AT1 receptor, in addition to inhibiting angiotensin II-dependent aldosterone release.

Risk in Pregnancy x

Adverse effects

Hyperkalemia, arterial hypotension, renal dysfunction, hypokalemia, dizziness, headache, vertigo, syncope, orthostatic hypotension, cough, diarrhea, nausea, renal failure, fatigue and asthenia.

Contraindications and Precautions

Contraindications: Hypersensitivity to the active components of the formula, co-administration with Angiotensin Converting Enzyme Inhibitor (ACEI), should not be administered until 36 hours after stopping treatment with ACEI, history of angioedema related to the use of ACEI or Antagonist Angiotensin Receptor Receptor (ARA), coadministration with aliskiren in patients with type 2 diabetes mellitus and pregnancy.
Precautions: Doses of Sacubitril Valsartan greater than 400 mg/day should not be used. If hypotension occurs, consideration should be given to adjusting the dose of diuretics or antihypertensives being administered in combination, in addition to considering other causes of hypotension (such as hypovolemia). If hypotension persists despite these measures, the dose of Sacubitril Valsartan should be reduced or its administration temporarily suspended. Symptomatic hypotension is more likely to occur if the patient suffers from hypovolemia as a result of, for example, treatment with diuretics, a low-sodium diet, diarrhea or vomiting. Sodium loss, hypovolemia, or both must be corrected before starting treatment with Sacubitril Valsartan. Analyze the possibility of reducing the dose of Sacubitril Valsartan in patients who present a clinically significant decrease in renal function. Use medications that increase potassium concentrations (such as potassium-sparing diuretics and potassium supplements) with caution when administered together with Sacubitril Valsartan; If clinically significant hyperkalemia occurs, consideration should be given to reducing the potassium content of the diet or adjusting the dosage of concomitant medications. If angioedema appears, immediately discontinue administration of Sacubitril Valsartan. Monitor renal function in patients with renal artery stenosis.

Precautions regarding dosage: The recommended starting dose of Sacubitril Valsartan is 100 mg twice a day.
A starting dose of 50 mg twice daily is recommended in patients not taking an angiotensin-converting enzyme inhibitor (ACE inhibitor) or an angiotensin II receptor antagonist (ARB), and should be considered in the case of patients who have previously taken low doses of these drugs.
The dose of Sacubitril Valsartan will be doubled every 2 to 4 weeks until the planned dose of 200 mg twice daily is reached, depending on the patient's tolerability.

Interactions

The joint administration of Sacubitril Valsartan and an ACEI is contraindicated because the concomitant inhibition of neprilysin and the action of the ACEI may increase the risk of angioedema. Administration together with aliskiren is contraindicated in patients with type 2 diabetes. Concomitant use of Sacubitril Valsartan with aliskiren should be avoided in patients with renal dysfunction. Sacubitril Valsartan acts as an antagonist of angiotensin II receptors, so it should not be combined with an ARB. Sacubitril inhibits the organic anion transporters OATP1B1 and OATP1B3, therefore it may increase systemic exposure to OATP1B1 and OATP1B3 substrates such as statins. Therefore, caution should be exercised when co-administering Sacubitril Valsartan and a statin. Caution should be exercised when starting to administer sildenafil or another phosphodiesterase type 5 inhibitor to patients receiving sacubitrile valsartan as it is associated with a reduction in blood pressure. Coadministration with potassium-sparing diuretics, mineralocorticoid receptor antagonists, potassium supplements, or potassium-containing table salt substitutes may increase serum potassium and creatinine concentrations.

In elderly patients, hypovolemic patients and patients with impaired renal function, the administration of sacubitril valsartan and a non-steroidal anti-inflammatory drug may increase the risk of worsening renal function. Serum lithium concentrations should be monitored during joint treatment for possible manifestations of toxicity.
The pharmacologically active metabolite of Sacubitril (LBQ657) and Valsartan are substrates of OATP1B1, OATP1B3 and OAT3; Valsartan is also a substrate of multidrug resistance protein 2 (MRP2). Therefore, coadministration of Sacubitril Valsartan and an inhibitor of OATP1B1, OATP1B3, OAT3 (such as rifampicin), or MRP2 (such as ritonavir) may increase the systemic exposure of LBQ657 or Valsartan, respectively.

TELMISARTAN

Clue	Description	**Indications** High	**Route of administration and dosage**
	TABLET Each tablet contains: Telmisartan 40 mg. Package with 30 tablets.	blood pressure essential.	Oral. Adults: 40 mg every 24 hours.
010.000.2540.00			

Generalities

Non-peptide antagonist of angiotensin II receptors, AT1 subtype.

Risk in Pregnancy

d

Adverse effects

Back pain, diarrhea, flu-like symptoms, dyspepsia and abdominal pain.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, pregnancy, lactation, obstructive pathology of the bile ducts, severe liver and/or kidney failure.

Interactions

Enhances the hypotensive effect of other antihypertensives. When co-administered with digoxin, its plasma concentration increases.

TELMISARTAN, HYDROCHLOROTHIAZIDE

Clue	Description	Indications	Route of administration and dosage
010.000.2542.00	TABLET OR CAPSULE Each tablet or capsule contains: Telmisartan 80.0 mg. Hydrochlorothiazide 12.5 mg. Package with 14 tablets or capsules.	Essential arterial hypertension.	Oral. Adults: 80 mg-12.5 mg every 24 hours.

Generalities

Combination of a non-peptide antagonist of Angiotensin II receptors, subtype AT1 and a thiazide diuretic.

Risk in Pregnancy x

Adverse effects

Anaphylactic reactions, angioneurotic edema, glottis edema, diarrhea, rarely hepatitis, presence of dry cough and arterial hypotension.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, kidney or liver failure.

Interactions

Rifampicin and fluconazole reduce their active metabolite, barbiturates or narcotics can accentuate orthostatic hypotension, it may be necessary to adjust the dose of antidiabetic medications, their association with other antihypertensives has a synergistic action.

TENECTEPLASE

Clue	Description	Indications	Route of administration and dosage
010.000.5117.00	INJECTABLE SOLUTION Each vial contains: Tenecteplase 50 mg (10,000 U). Package with vial and syringe prefilled with 10 mL of injectable water.	Acute infarction of the myocardium. Thrombolytic treatment of acute myocardial infarction.	Intravenous: single bolus in 5-10 seconds. Adults: Patient mg (kg body weight) U Volume (mL) < 60 30 6000 ÿ60-<70 35 7000 ÿ70-<80 40 8000 ÿ80-<90 45 9000 ÿ90 50 10000

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Generalities

Recombinant plasminogen activator protein that causes rapid vascular repermeabilization that leads to the preservation of ventricular function.

Risk in Pregnancy x

Adverse effects

Superficial or internal bleeding, cardiac arrhythmias, embolization of cholesterol crystals, thrombotic embolization, nausea, vomiting, anaphylactoid reactions, arterial hypotension, hyperthermia and bronchospasm.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, treatment with anticoagulants, hemorrhagic diathesis, active or recent hemorrhage, history of recent hemorrhagic stroke, severe or uncontrolled arterial hypertension, endocarditis or

bacterial pericarditis, acute pancreatitis or peptic ulcer in the last three months, esophageal varices and arterial aneurysms.

Interactions

The prior or simultaneous administration of anticoagulants and platelet aggregation inhibitors increases the risk of bleeding.

TIROFIBAN

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each vial or bag contains: Tirofiban hydrochloride equivalent to 12.5 mg of Tirofiban. 010.000.4123.00 Container with a vial bottle with 50 mL. 010.000.4123.01 Container with a bag with 250 mL.	States of hypercoagulability. Prophylaxis of post-coronary vascular reperfusion thrombosis with thrombolytics.	Intravenous infusion. Adults: Initial dose: 0.4 µg/Kg/minute, for 30 minutes. Maintenance dose: At the end of the initial dose continue with 0.1 µg/Kg/minute.

Generalities

Non-peptide antagonist of Gp IIb/IIIa receptors. It prevents the binding of fibrinogen to GP IIB/IIIa, blocking cross-linking and platelet aggregation.

Risk in Pregnancy d

Adverse effects

Bleeding, thrombocytopenia, chills, abdominal pain, dizziness, headache and nausea.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, thrombocytopenia, active bleeding, history of intracranial hemorrhage or tumor, arteriovenous malformation or aneurysm, pregnancy and lactation.

Interactions

With oral anticoagulants the prothrombin time is prolonged, with antiplatelet agents bleeding can be caused, with digitalis, antihistamines and tetraclines the anticoagulant action can be limited.

GLYCERYL TRINITRATE

Clue	Description	Indications	Route of administration and dosage
010.000.4114.00	INJECTABLE SOLUTION Each vial contains: Glyceryl trinitrate 50 mg. Package with a 10 mL vial.	Hypertensive crisis. Treatment and prophylaxis of angina pectoris. Chronic ischemic heart disease. Heart failure.	Intravenous infusion. Adults: 5 to 15 µg per minute. The dose is increased until systolic pressure is reduced to normal limits. Administer diluted in intravenous solutions packaged in glass bottles.
010.000.4111.00	PATCH Each patch releases: Glyceryl trinitrate 5 mg/day Package with 7 patches.		Transdermal. Adults: 5 mg/day.

Generalities

It is a powerful vasodilator that relaxes the peripheral arteries and veins, consequently reducing cardiac output and oxygen consumption by the myocardium.

Risk in Pregnancy c

Adverse effects

Headache, tachycardia, hypotension and dizziness, tolerance and physical dependence.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, arterial hypotension, head trauma, cardiomyopathy and anemia, do not use in children.

Interactions

With antihypertensives, opiates and ethyl alcohol, hypotension increases. With adrenergic agents their antianginal effect decreases.

VALSARTAN

Clue	Description	Indications	Route of administration and dosage
010.000.5111.00	COMPRESSED Each tablet contains 80 mg. Package with 30 tablets.	Essential arterial hypertension.	Oral. Adult: 80 mg every 24 hours.

Generalities

Non-peptide antagonist of angiotensin II receptors, AT1 subtype. Angiotensin II, as a potent vasoconstrictor, produces a direct pressor response. In addition, it promotes sodium retention and stimulates the secretion of aldosterone.

Risk in Pregnancy

d

Adverse effects

Vertigo, insomnia, rash and decreased libido.

Contraindications and Precautions

Hypersensitivity to the drug, pregnancy and lactation.

Interactions

Phenobarbital and cimetidine favor its biotransformation.

VERAPAMIL

Clue	Description	Indications	Route of administration and dosage
010.000.0596.00	DRAGEE OR COATED TABLET Each coated tablet or dragee contains: Verapamil Hydrochloride 80 mg. Package with 20 coated tablets or dragees.	Atrial arrhythmias. Angina pectoris. Arterial hypertension.	Oral. Adults: 80 mg every 8 hours.
010.000.0598.00	INJECTABLE SOLUTION Each vial contains: Verapamil Hydrochloride 5 mg. Container with 2 mL (2.5 mg/ mL).		Intravenous. Adults: 0.075 to 0.15 mg/kg body weight for 2 minutes. Children from 1 to 15 years: 0.1 to 0.3 mg over 2 minutes. Children under 1 year old. 0.1 to 0.2 mg/kg body weight. In all cases, the dose can be repeated 30 minutes later if the desired effect does not appear. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

It inhibits the flow of calcium ions (and possibly sodium ions) through slow calcium channels in contractile and conduction cells and vascular smooth muscle cells. Calcium channel blocker in cardiac and smooth muscle.

Risk in Pregnancy

c

Adverse effects

Nausea, dizziness, headache, flushing, hypotension, constipation, edema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, lactation, cardiogenic shock, atrioventricular block, arterial hypotension, asthma and beta blockers. Precautions: Kidney and liver failure.

Interactions

With beta blockers hypotension and heart failure are favored; ranitidine and erythromycin decrease its biotransformation.

WARFARINE

Clue	Description	Indications	Route of administration and dosage
	TABLET	Prophylaxis and treatment of thromboembolic conditions.	Oral.
	Each tablet contains:		Adults and kids older than 12 years old:
	Warfarin sodium 5 mg.	Deep venous thrombosis	Initial: 2-5 mg/day
010.000.0623.00	Package with 25 tablets.	Pulmonary thromboembolism.	10 to 15 mg daily for two to five days afterward.
			Maintenance: 2 to 10 mg per day, according to the prothrombin time.

Generalities

Coumarin anticoagulant that inhibits the effect of vitamin K and consequently decreases the formation of coagulation factors II (prothrombin), VII, IX, X and proteins C and S.

Risk in Pregnancy

x

Adverse effects

The most frequent and important risk is hemorrhage (6 to 29%); that occurs anywhere in the body. Nausea, vomiting, diarrhea, alopecia and dermatitis.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug. Pregnancy, active bleeding, recent surgical interventions or trauma, active peptic ulcer, threatened abortion, pregnancy, blood dyscrasias, bleeding tendency, severe arterial hypertension.

Precautions: Breastfeeding, children under 18 years of age. The dose should be lower in elderly and debilitated patients.

Interactions

Most medications increase or decrease the anticoagulant effect of warfarin, so it is necessary to readjust its dose based on the prothrombin time each time a medication is added or stopped.