Ancor A

Bisoprolol Fumarate + Amlodipine

COMPOSITION
Ancor A 2.5/5 Tablet: Each film coated tablet contains Bisoprolol Fumarate USP 2.5 mg and Amlodipine Besilate BP equivalent to Amlodipine 5 mg.

PHARMACOLOGY
This product is a combination of a selective b_1-blocker, Bisoprolol and a calcium channel blocker, Amlodipine. Bisoprolol works by relaxing blood vessels and slowing heart rate to improve and decrease blood pressure. Amlodipine blocks the action of calcium on the heart and blood vessels. As a result, blood vessels are relaxed and heart beats with less force. This lowers the blood pressure; abnormally fast heart beat and protects the heart following a heart attack.

This combination allows to increase the antihypertensive and anti-anginal efficacy by complementary mechanism of actions of the two active compounds: Vasoselective effect of the calcium channel blocker Amlodipine (decrease of peripheral resistance) and cardio selective beta-blocker Bisoprolol (decrease of cardiac output).

PHARMACOKINETICS
Bisoprolol: *Absorption:* Bisoprolol is absorbed almost completely (>90%) from the gastrointestinal tract. *Distribution:* Its volume of distribution is 3.5 L/Kg. The plasma protein binding of Bisoprolol is about 30%. *Metabolism and Elimination:* 50% is metabolized by the liver to inactive metabolites, which are then excreted by the kidneys. The remaining 50% is excreted by the kidneys in an unmetabolized form. The elimination half-life in plasma is 10-12 hours.

Amlodipine: *Absorption:* Amlodipine is well absorbed with peak blood levels between 6-12 hours post dose. Its bioavailability is unaffected by food ingestion. Absolute bioavailability has been estimated to be between 64 and 80%. *Distribution:* The volume of distribution is 21 L/Kg. Steady state plasma concentration (5-15 ng/mL) is reached after 7-8 days of consecutive daily dosing. 93-98% of circulating Amlodipine is bound to plasma protein. *Metabolism and Elimination:* Metabolized (approximately 90%) by the liver to inactive pyridine derivatives. 10% of the parent compound and 60% of inactive metabolites excreted in the urine, 20-25% with feces. The terminal plasma elimination half-life is about 35-50 hours and is consistent with once daily dosing.

INDICATIONS & USES
Ancor A is indicated for the treatment of mild to moderate hypertension in adults.

DOSAGE & ADMINISTRATION
The recommended daily dose is one tablet in the morning with or without food. Treatment with Bisoprolol + Amlodipine (**Ancor A**) combination must not be stopped abruptly. Gradual reduction of the daily dose is recommended.

CONTRAINDICATIONS
This combination is contraindicated in cardiogenic shock, overt cardiac failure, second or third degree AV block, and marked sinus bradycardia and known sensitivity to Bisoprolol/ Amlodipine.

SIDE EFFECTS
Edema feet, headache, fatigue, leg cramps, dry mouth. Other adverse events reported were gastric irritation, angina, asthma, cold extremities, cough, decrease in libido, dizziness, facial flushing, postural hypotension, skin rash, sleep disturbance, vertigo, alopecia etc.

USE IN SPECIAL POPULATION
Use in Pregnancy: FDA pregnancy category C drug. Bisoprolol + Amlodipine combination is not recommended during pregnancy unless clearly necessary.

Use in Lactation: It is not known whether Bisoprolol or Amlodipine is excreted in human milk. Therefore, administration of Bisoprolol + Amlodipine combination is not recommended during breastfeeding.

Children: There is no experience with Bisoprolol + Amlodipine combination in the pediatric population. Therefore, its use cannot be recommended.

Elderly: No dosage adjustment is required. However, caution is advised when the dose is increased.

Renal Impairment: No dosage adjustment is required for patients with mild to moderate renal impairment. In case of severe renal impairment (creatinine clearance <20 mL/min), the daily dose of the Bisoprolol component of Bisoprolol + Amlodipine combination must not exceed 10 mg.

Hepatic Impairment: In case of severe hepatic impairment, the daily dose of the Bisoprolol component in Bisoprolol + Amlodipine combination must not exceed 10 mg.

DRUG INTERACTIONS
Combinations not recommended: Calcium antagonists of the Verapamil type and to a lesser extent of the diltiazem type; Centrally acting antihypertensive drugs such as Clonidine, Methyldopa, Moxonidine, Rilmenidine. *Combinations to be used with caution:* CYP3A4 Inhibitors-Protease inhibitors, Azole antifungals, Macrolides like erythromycin or clarithromycin, verapamil or diltiazem; CYP3A4 Inducers - Rifampicin, Hypericum perforatum;Simvastatin; Class-I Antiarrhythmic Drugs - Quinidine, Disopyramide, Lidocaine, Phenytoin, Flecainide, Propafenone; Class-III Antiarrhythmic Drugs - Amiodarone; Parasympathomimetic drugs; Topical beta-blocker containing preparations - Eye drops for glaucoma treatment; Insulin and oral antidiabetic drugs; Anesthetic agents; Cardiac glycosides (Digitalis); Non-Steroidal Anti-Inflammatory Drugs (NSAIDs); Beta-sympathomimetic agents - Isoprenaline, Dobutamine; Sympathomimetics that activate both beta- and alpha-adrenoceptors - norepinephrine, epinephrine; Antihypertensive agents as well as other drugs with blood pressure lowering potential -Tricyclic antidepressants, Barbiturates, Phenothiazines. *Combinations to be considered:* Mefloquine; Monoamine Oxidase Inhibitors (Except MAO-B Inhibitors); Ergotamine derivatives.

OVERDOSE
Bisoprolol: The most common signs expected with overdose of a b-blocker are bradycardia, hypotension, bronchospasm, acute cardiac insufficiency and hypoglycemia.

Amlodipine: Gross overdose could result in excessive peripheral vasodilatation and possibly reflex tachycardia.

If overdose occurs, discontinuation of Bisoprolol + Amlodipine treatment and supportive and symptomatic treatment is recommended including frequent monitoring of cardiac and respiratory function.

STORAGE CONDITION
Store below 30° C in a dry place, protect from light & moisture. Keep away from children.

HOW SUPPLIED
Ancor A 2.5/5 Tablet: Each box contains 30 tablets in alu-alu blister pack.