Adorbis

Bisoprolol Fumarate BP

Composition
Adorbis 2.5 Tablet: Each film coated tablet contains Bisoprolol Hemifumarate BP 2.5 mg.
Adorbis 5 Tablet: Each film coated tablet contains Bisoprolol Hemifumarate BP 5 mg.
Adorbis 10 Tablet: Each film coated tablet contains Bisoprolol Fumarate BP 10 mg.

Description
Bisoprolol is a β1-selective (cardio selective) adrenoceptor blocking agent for the treatment of hypertension.

Pharmacology
Bisoprolol is a highly β1 selective β-blocker. Beta-blockers with high β1 selectivity have substantial clinical advantages over non-selective agents in terms of their respiratory, hemodynamic and metabolic effects. Most of the desirable therapeutic actions of β-blockers result from blocking the β1-receptor. Avoiding the inhibition of β2-receptor-mediated actions (only show very low affinity) helps to avoid undesirable side-effects on lung function, peripheral circulation, serum lipids and carbohydrate metabolism. The β1 selectivity of Bisoprolol extends beyond the therapeutic dose range. The beneficial effects of antihypertensive therapy with β1 selective β-blockers in non-diabetic and diabetic patients became evident in various clinical studies in patients with CAD and hypertension. Bisoprolol is devoid of intrinsic sympathomimetic activity (ISA), without relevant membrane stabilizing activity and has no pronounced negative inotropic effect.

Pharmacokinetics
The pharmacokinetic properties of Bisoprolol provide the prerequisite for a single daily dose and ensure an extremely low inter and intra-individual variability of the plasma concentration profiles. The high therapeutic reliability of Bisoprolol is based on these properties. Absorption and bioavailability: Bisoprolol is almost completely (>90%) absorbed from the gastrointestinal tract. The high absorption rate and the small first-pass effect (<10%) lead to an absolute bioavailability of 88%. Concomitant food intake does not affect the absorption. Distribution: Bisoprolol is extensively distributed. The medium distribution volume is 3.51/kg. Metabolism: Bisoprolol is metabolized via oxidative pathways with no subsequent conjugation. All metabolites, being very polar, are renally eliminated. The major metabolites in human plasma and urine were found to be without pharmacological activity. In vitro data from studies in human liver microsomes show that Bisoprolol is primarily metabolized via CYPSA4 (-95%) with CYP2D6 having only a minor role. Elimination: The clearance of Bisoprolol is balanced between renal elimination of the unchanged molecule (-50%) and hepatic metabolism (-50%) to metabolites which are also renally excreted. The total clearance of Bisoprolol is approximately 15 l/h. Bisoprolol has an elimination half-life of 10-12 hours.

Indications
Bisoprolol is indicated in the management of hypertension and in the treatment of coronary heart disease (angina Pectoris). It may be used alone or in combination with other antihypertensive agents.

Dosage & administration
Hypertension: The dose of Bisoprolol must be individualized to the needs of the patient. The usual starting dose is 5 mg once daily. In some patients, 2.5 mg may be an appropriate starting dose. If the antihypertensive effect of 5 mg is inadequate, the dose may be increased to 10 mg and then, if necessary, 20 mg once daily.
Angina: Usually 10 mg once daily (5 mg may be adequate in some patients) maximum 20 mg daily.
Heart failure: Initially 1.25 mg once daily (in the morning) for 1 week then, if well tolerated, increased to 2.5 mg once daily for 1 week, then 3.75 mg once daily for 1 week, then 5 mg once daily for 4 weeks, then- 7.5 mg once daily for 4 weeks, then 10 mg once daily maximum 10 mg daily.
Patients with renal or hepatic impairment: In patients with hepatic impairment (hepatitis or cirrhosis) or renal dysfunction (creatinine clearance less than 40 mL/min), the initial daily dose should be 2.5 mg and caution should be used in dose-titration. Since limited data suggest that Bisoprolol is not dialyzable, drug replacement is not necessary in patients undergoing dialysis.
Geriatric patients: It is not necessary to adjust the dose in the elderly, unless there is also significant renal or hepatic dysfunction.
Pediatric patients: There is no pediatric experience with Bisoprolol.

Contraindications
Bisoprolol is contraindicated in patients with cardiogenic shock, overt cardiac failure, second- or third-degree AV block, and marked sinus bradycardia.

Side effects
Medicines and their possible side effects can affect individual people in different ways. The following are some of the side effects that are known to be associated with this medicine. Just because a side effect is stated here does not mean that all people using this medicine will experience that or any side effect. Fatigue, dizziness, headache, disturbances of the gut such as nausea, vomiting, diarrhea, constipation or abdominal pain. Cold or numb extremities, e.g; hands and feet. Muscle weakness or cramps. Slower than normal heart breathing difficulties due to a narrowing of the airways (bronchospasm) in people with asthma or COPD.

Precautions
Impaired renal or hepatic function use caution in adjusting the dose of Bisoprolol in patients with renal or hepatic impairment.
Risk of anaphylactic reaction: While taking beta-blockers, patients with a history of severe anaphylactic reaction to a variety of allergens may be more reactive to repeated challenge, accidental, diagnostic, or therapeutic. Such patients may be unresponsive to the usual doses of epinephrine used to treat allergic reactions.

Use in pregnancy and lactation
There are no adequate and well-controlled studies in pregnant women. Bisoprolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Drug interactions
Bisoprolol should not be combined with other beta-blocking agents. Patients receiving catecholamine-depleting drugs, such as reserpine or guanethidine, should be closely monitored, because the added beta-adrenergic blocking action of Bisoprolol may produce excessive reduction of sympathetic activity. In patients receiving concurrent therapy with clonidine, if therapy is to be discontinued, it is suggested that Bisoprolol be discontinued for several days before the withdrawal of clonidine. Bisoprolol should be used with care when myocardial depressants or inhibitors of AV conduction, such as certain calcium antagonists (verapamil, diltiazem classes, or antiarrhythmic agents, such as disopyramide, are used concurrently. Concurrent use of Rifampin increases the metabolic clearance of Bisoprolol resulting in a shortened elimination half- life of Bisoprolol. However, Initial dose modification is generally not necessary. There was no effect of Bisoprolol on prothrombin time in patients on stable doses of Warfarin.

Overdosage
The most common signs expected with overdosage of a β-blocker are bradycardia, hypotension, congestive heart failure, bronchospasm and hypoglycemia. A few cases of overdose (maximum: 2000 mg) with Bisoprolol have been reported. Bradycardia and/or hypotension were noted.

Storage
Do not store above 25º C. Protect from light. Keep out of reach of children.

Packaging
Adorbis 2.5 Tablet: Each carton contains 3×10's tablets in blister pack.
Adorbis 5 Tablet: Each carton contains 3×10's tablets in blister pack.
Adorbis 10 Tablet: Each carton contains 3×10's tablets in blister pack.

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Manufactured by

ZISKA PHARMA

Ziska Pharmaceuticals Ltd.
Kaliakoir, Gazipur, Bangladesh

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