Dizmo™

Itopride Hydrochloride INN

COMPOSITION
Dizmo™ 50 Tablet: Each film coated tablet contains Itopride Hydrochloride INN 50 mg.

DESCRIPTION
Dizmo™ is a prokinetic benzamide derivative. It inhibits dopamine and have a gastroprokinetic effect. Chemically, **Dizmo**™ is N-[4-[2-(Dimethylamino) ethoxy] benzyl]-3, 4 – dimethoxybenzamide monohydrochloride.

MECHANISM OF ACTION
Dizmo™ increases the release of acetylcholine through dopamine D2 – receptor antagonistic activity and inhibits decomposing released acetylcholine through its acetylcholine esterase (AChe) inhibitory action, resulting in enhancement of gastrointestinal activity. Higher acetylcholine increases GI peristalsis, increases the lower oesophageal sphincter peristalsis, stimulates gastric motility, accelerates gastric emptying and improves gastro-duodenal coordination.

PHARMACOKINETICS
Absorption
Dizmo™ is rapidly and almost completely absorbed from the gastrointestinal tract. Relative bioavailability is calculated to be 60% due to liver first pass metabolism. Peak plasma levels (Cmax 0.28 µg/mL) are reached after 0.5 to 0.75 hours after 50 mg of **Dizmo**™. Following multiple oral doses ranging from 50 mg to 200 mg tid, **Dizmo**™ and its metabolites showed linear pharmacokinetics over a treatment period of seven days, with minimal accumulation.
Distribution
Approximately 96% of **Dizmo**™ is bound to plasma proteins. Albumin accounts for most of the binding. Alpha-1-acid-glycoprotein accounts for less than 15% of binding.
Metabolism
Dizmo™ undergoes extensive hepatic metabolism in humans. Three (3) metabolites have been identified, of which only one exerts minor activity without pharmacological relevance (approximately 2-3% of that of **Dizmo**™). The primary metabolite in human is the N-oxide, generated by oxidation of the tertiary amine N-dimethyl group. **Dizmo**™ is metabolized by a flavin-dependent mono-oxygenase (FMO3).
Excretion
Dizmo™ and its metabolites are primarily excreted in the urine. The urinary excretions of **Dizmo**™ and its N-oxide were 3.7% and 75.4%, respectively, in healthy subjects after oral administration of a single therapeutic dose. The terminal phase half-life of **Dizmo**™ approximately six (6) hours.

SPECIAL POPULATIONS
Pediatric Use:
Safety of this product in children under the age of 16 has not been established.
Geriatric Use:
In general, appropriate caution should be exercised in the administration and monitoring of **Dizmo**™ in elderly patients reflecting the greater frequency of decreased hepatic, renal function, and of concomitant disease or other drug therapy.
Patients with fish odor syndrome:
The abundance and efficiency of the human FMO-isozymes can be subject to genetic polymorphisms, which can lead to a rare autosomal recessive condition known as trimethylaminuria. Therefore, the half- life of **Dizmo**™ may be longer in trimethylaminuria (fish odor syndrome) patients.

INDICATION
Dizmo™ tablet is used for the treatment of gastrointestinal symptoms of:
• Functional dyspepsia, • Non –Ulcer Dyspepsia (chronic gastritis), • Sensation of bloating, • Early satiety, • Upper abdominal pain or discomfort,
• Anorexia, • Heartburn, • Nausea and • Vomiting

DOSAGE & ADMINISTRATION
The usual adult dosage for oral use is 150 mg of **Dizmo**™ (Itopride Hydrochloride) daily in three divided doses before meals. The dose may be reduced according to patient's age and symptoms.

ADVERSE REACTIONS
The following adverse events have been reported in patients receiving Itopride Hydrochloride:
Blood and lymphatic system disorders: Leukopenia and thrombocytopenia.
Immune system disorders: Hypersensitivity, including Anaphylactoid reaction.
Endocrine disorders: Blood prolactin increased
Nervous system disorders: Dizziness, headache, and tremor.
Gastrointestinal disorders: Diarrhea, constipation, abdominal pain, salivary hypersecretion and nausea.
Hepato-biliary disorders: Jaundice.
Skin and subcutaneous tissue disorders: Rash, Erythema and Pruritus
Investigations: Aspartate aminotransferase increased, Alanine aminotransferase increased, Gamma-glutamyltransferase increased, Blood alkaline phosphatase increased and Blood bilirubin increased

CONTRAINDICATIONS
Itopride hydrochloride is contraindicated in-
• Patients with known hypersensitivity to itopride hydrochloride or any of the excipients.
• Patients in whom an increase in gastrointestinal motility could be harmful, e.g. gastrointestinal hemorrhage, mechanical obstruction or perforation.

WARNING & PRECAUTIONS
• Itopride Hydrochloride should be used with caution since it enhances the action of acetylcholine. Also, caution is advised in treatment of patients suffering from Parkinson's disease and conditions involving dopamine regulation issues.
• Itopride Hydrochloride should not be used aimlessly for a long term when no improvement of gastrointestinal symptoms is observed.

PREGNANCY AND NURSING MOTHERS
Itopride Hydrochloride should be used in pregnant women or in women who may be possibly be pregnant only if the expected therapeutic benefits outweigh the possible risks associated with treatment. The safety of Itopride Hydrochloride is pregnant women has not been established. It is ideal not to use Itopride Hydrochloride in women during lactation, but if it is necessary, breastfeeding should be avoided during the treatment of Itopride Hydrochloride.

DRUG INTERACTIONS
Itopride Hydrochloride has gastrokinetic effects, therefore, it could influence the absorption of concomitantly orally administered drugs. Particular caution should be taken with drugs with a narrow therapeutic index, sustained-release or enteric –coated formulations.
Concomitant administration with anticholinergic drugs e.g. Tiquizium bromide, scopolamine butyl bromide, timepidium bromide, etc may reduce the action of Itopride Hydrochloride

OVERDOSE
There have been no reported causes of overdose in humans. In case of excessive overdose, the usual measures of gastric lavage and symptomatic therapy should be applied.

STORAGE
Store below 30^{0} C, protect from light and moisture. Keep all medicines out of the reach of children

HOW SUPPLIED
Dizmo™ 50 Tablet: Each box contains 50 Tablets in Alu-Alu blister pack.

Manufactured by –
SQUARE
PHARMACEUTICALS PLC.
Kaliakoir, Gazipur, Bangladesh

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