1. Name of the medicinal Product

Loperamide Hydrochloride Capsules USP 2 mg

2. Qualitative and Quantitative Composition

Qualitative declaration

Loperamide Hydrochloride USP

Quantitative declaration

Each tablet contains 71.00 mg of Lactose Monohydrate.

For full list of Excipients, see section 6.1.

3. Pharmaceutical Form

Oral Capsule

Distribution Category: POM

Dark green/ purple colour, Size "4" hard gelatin capsule containing white to off white powder.

4. Clinical Particulars

1. Therapeutic Indications

Loperamide hydrochloride capsule is indicated for the control and symptomatic relief of acute nonspecific diarrhea and of chronic associated with inflammatory bowel disease. Loperamide hydrochloride capsule are also indicated for reducing the volume of discharge from ileostomies. It can be used for traveler's diarrhea.

2. Posology and Method of Administration

Adults: Acute diarrhea: Initial: 4 mg (two capsules), followed by 2 mg (one capsule) after each loose stool, up to 16 mg/day.

Chronic diarrhea: Initial: Follow acute diarrhea; maintenance dose should be slowly titrated downward to minimum required to control symptoms (typically, 4-8 mg /day in divided doses).

Traveler's diarrhea: Initial: 4 mg after first loose stool, followed by 2 mg after each subsequent stool (maximum dose: 8 mg/day).

Elderly: Refer to adult dosing.

Pediatric: Acute diarrhea: Initial doses (in first 24 hours).

6-8 years (20-30 kg): 2 mg (one capsule) twice daily.

8-12 years (>30 kg): 2 mg (one capsule) 3 times/day.

Maintenance: After initial dosing, 0.1 mg/kg doses after each loose stool, but nor exceeding initial dosage.

Traveler's diarrhea: 6-8 years: 2 mg (one capsule) after first loose stool, followed by 1 mg after each subsequent stool (maximum dose: 4 mg/day).

9-11 years: 2 mg (one capsule) after first loose stool, followed by 1 mg after each subsequent stool (maximum dose: 6 mg/day). ≥12 years: Refer to adult dosing.

3. Contraindications

Loperamide Hydrochloride capsule is contraindicated in patients with a known hypersensitivity to Loperamide hydrochloride or to any of the excipients.

In children less than 6 years of age.

In patients with acute dysentery, which is characterized by blood in stools and high fever.

In patients with acute ulcerative colitis.

In patients with bacterial enterocolitis caused by invasive organisms including salmonella, Shigella and Campylobacter.

In patients with pseudomembranous colitis associated with the use of broad-spectrum antibiotics

4. Special Warnings and Special Precautions for Use

In patients with diarrhea, especially in children, frail and elderly patients, fluid and electrolyte depletion may occur. In such cases administration of appropriate fluid and electrolyte replacement therapy is the most important measure.

In acute diarrhea, if clinical improvement is not observed within 48 hours, the administration of Loperamide HCl should be discontinued and patients should be advised to consult their physician.

Treatment of diarrhea with Loperamide hydrochloride is only symptomatic. Whenever an underlying etiology can be determined, specific treatment should be given when appropriate.

Patients with AIDS treated with Loperamide HCl for diarrhea should have therapy at the earliest signs of abdominal distension. There have been obstipation with an increased risk for

toxic megacolon in AIDS patients with infectious colitis from both viral and bacterial pathogens treated with Loperamide HCl.

Impaired hepatic Function: Loperamide HCl should be used with caution in such patients because of reduced first pass metabolism. It must be used with caution in patients with hepatic impairment as it may result in a relative overdose leading to CNS toxicity.

Impaired renal function: No dose adjustment is required for patients with renal impairment.

Pregnancy: Pregnancy Category B: There are no adequate and well-controlled studies in pregnant women. Loperamide should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Lactation: Small amounts of Loperamide may appear in human breast milk. Therefore, this medicine is not recommended during breast-feeding.

Caution for use: It contains lactose excipients with known effect: Patients with galactose intolerance, the lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

5. Interaction with other medicinal products and other forms of interaction

Ketoconazole: The concomitant administration of Loperamide (16 mg single dose) and ketoconazole, an inhibitor of CYP3A4 and P-glycoprotein, resulted in a 5-fold increase in Loperamide plasma concentrations.

Itraconazole: The concomitant administration of Loperamide (4 mg single dose) and Itraconazole, an inhibitor of CYP3A4 and P-glycoprotein, resulted in a 3 to 4-fold increase in Loperamide plasma concentrations.

Desmopressin: Concomitant treatment with oral desmopressin resulted in a 3-fold increase of desmopressin plasma concentrations.

P-glycoprotein substance inhibitors: Concomitant administration of Loperamide (16 mg single dose) with quinidine, or ritonavir, which are both P-glycoprotein, resulted in a 2 to 3 -fold increase in Loperamide plasma levels.

6. Pregnancy and Lactation

Pregnancy: Pregnancy Category B: There are no adequate and well-controlled studies in pregnant women. Loperamide should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Lactation: Small amounts of Loperamide may appear in human breast milk. Therefore, this medicine is not recommended during breast-feeding

7. Effects on ability To Drive and use Machines

None expected at recommended doses and duration of therapy.

8. Undesirable Effects

Central nervous system: Dizziness, headache

Gastrointestinal: Constipation, abdominal cramping, nausea

9. Overdose

Symptoms: In case of overdose (including relative overdose due to hepatic dysfunction), CNS depression (stupor, coordination abnormality, somnolence, miosis, muscular hypertonia and respiratory depression), constipation, urinary retention and ileus may occur. Children and patients with hepatic dysfunction may be more sensitive to CNS effects.

Treatment: If symptoms of overdose occur, naloxone can be given as an antidote. Since the duration of action of Loperamide is longer than that of naloxone (1 to 3 hours). Repeated treatment with naloxone with might be indicated.

Therefore, the patient should be monitored closely for at least 48 hours in order to detect possible CNS depression.

5. Pharmacological Properties

1. Pharmacodynamics Properties

Pharmacotherapeutic Group: Antipropulsives

ATC code: A07DA03

Loperamide binds to the opiate receptor in the gut wall, reducing propulsive peristalsis and increasing intestinal transit time. Loperamide increases the tone of the anal sphincter.

2. Pharmacokinetic Properties

Absorption: More than 65% of a dose of Loperamide is reported to be absorbed from the gastrointestinal tract.

Distribution: Poor penetration into brain; low amounts enter breast milk.

Metabolism and Elimination: The drug undergoes considerable first pass metabolism in the liver and excretion via the bile in the faeces as the inactive conjugate. As a result of the drug's high affinity for the gut wall and its high first pass metabolism very little Loperamide reaches the systemic circulation and therefore there is only a small amount of urinary excretion.

Half-life: The half-life of Loperamide with a range of 7-14 hours.

3. Preclinical Safety Data

Not Applicable.

6. Pharmaceutical Particulars

1. List of Excipients

Lactose Monohydrate USP/NF

Pregelatinized Starch (Starch 1500) BP

Colloidal Anhydrous Silica (Aerosil) BP

Croscarmellose Sodium USP/NF

Magnesium Stearate BP

Empty Hard Gelatin Capsules Dark Green/Purple Size "4" IHS:

Gelatin IP/BP/USP

Water IP/BP/USP

Sodium Methyl Paraben IP/BP/USP

Sodium Lauryl Sulphate IP/BP/USP

2. Incompatibilities

Not applicable.

3. Shelf Life

36 Months

4. Special Precautions for Storage

Do not store above 30°C. Protect from light & moisture.

5. Nature and Contents of Container

10 Capsules are packed in Alu-PVC Blister pack. Such 10 blisters are packed in a printed carton with package insert.

6. Special precaution for disposal and other handling

No special requirements for disposal.

7. Marketing Authorization Holder And Manufacturing Site Addresses

7.1 Name and Address of Marketing Authorization Holder

Lincoln Pharmaceuticals Limited
Trimul Estate, Khatraj, Taluka: Kalol,
District: Gandhinagar Gujarat, India.
Telephone no.: +91-02764-665000
Fax: +91-02764-281809
Email: info@lincolnpharma.com
Website: www.lincolnpharma.com

7.2 Name and Address of manufacturing site(s)

Lincoln Pharmaceuticals Limited
Trimul Estate, Khatraj, Taluka: Kalol,
District: Gandhinagar Gujarat, India.
Telephone no.: +91-02764-665000
Fax: +91-02764-281809
Email: info@lincolnpharma.com
Website: www.lincolnpharma.com

8. Marketing Authorization Number

9. Date of First <Registration> / Renewal of The <Registration>

10. **Date of Revision of the Text**

11. Dosimetry (If Applicable)

Not Applicable

12. Instructions for preparation of radiopharmaceuticals (if Applicable)

Not Applicable