For the use of only a Registered Medical Practitioner or a Hospital or a Laboratory

Not to be sold by retail without the prescription of a Registered Medical Practitioner

## **Prescribing Information**

## 1. Generic Name

Cilnidipine Tablets IP 5 mg / 10 mg (Brand Name: CILNIBLU<sup>®</sup> 5 mg / 10 mg Tablets)

# 2. Qualitative and Quantitative Composition

## 3. Dosage Form and Strength

Dosage Form: Tablets. Dosage Strength: Cilnidipine 5 mg per tablet; Cilnidipine 10 mg per tablet.

## 4. Clinical Particulars

#### **4.1 Therapeutic Indication**

CILNIBLU Tablets are indicated for the treatment of hypertension, to lower blood pressure. Lowering blood pressure reduces the risk of fatal and non-fatal cardiovascular events, primarily stroke and myocardial infarction (MI).

CILNIBLU Tablets may be used alone or in combination with other antihypertensive drugs.

# 4.2Posology and Method of Administration

For oral administration in adults.

The usual dose of cilnidipine is 5 to 10 mg once daily; if necessary, dosage may be increased to 20 mg once daily.

CILNIBLU Tablets can be administered regardless of meal. The tablet should be swallowed whole with water.

Or, as prescribed by the physician.

# 4.3Contraindications

CILNIBLU Tablets are contraindicated in the following conditions:

- Hypersensitivity to cilnidipine or to any component of the formulation.
- Cardiogenic shock.
- Severe aortic stenosis.
- Recent history of unstable angina or acute myocardial infarction, heart failure, hypotension.

#### **4.4Special Warnings and Precautions for Use**

**Cardiovascular Disorders:** Cilnidipine should be used with caution in patients with hypotension, heart failure, and poor cardiac reserve. Cilnidipine should be discontinued immediately in patients who feel chest pain following the administration of the drug.

**Abrupt Cessation of Therapy:** In case of angina, cilnidipine should not be discontinued abruptly to avoid withdrawal symptoms.

**Grapefruit Juice:** Grapefruit juice may intensify the effect of cilnidipine. Thus, avoid drinking grapefruit juice as much as possible while on cilnidipine therapy.

**Laboratory Test:** Cilnidipine therapy may interfere with the results of vanillyl mandelic acid test which is used to detect tumors such as pheochromocytoma and neuroblastoma. Therefore, cilnidipine should be avoided for 72 hours before sample collection, but the patient should be monitored intensively in a clinical setting.

# **4.5Drug Interactions**

Antipsychotic Drugs: Co-administration of antipsychotic drugs with cilnidipine may result in low blood pressure. Thus, caution should be exercised while concomitant use of these drugs with cilnidipine.

**Antidiabetic Drugs:** Co-administration of cilnidipine with antidiabetic drugs may result in changes in glucose levels, thus, monitoring of blood glucose levels may be required.

**Other Drugs:** Antiepileptic drugs (such as phenytoin and carbamazepine), rifampin, quinidine, erythromycin, other anti-hypertensive drugs, and aldesleukin should also be used with caution along with cilnidipine.

# 4.6Use in Special Populations

#### **Pregnant Women**

Hypertension in pregnancy increases the maternal risk for pre-eclampsia, gestational diabetes, premature delivery, and delivery complications (e.g., need for cesarean section, post-partum hemorrhage). Hypertension increases the fetal risk for intrauterine growth restriction and intrauterine death. Thus, pregnant women with hypertension should be carefully monitored and managed accordingly. The safety of cilnidipine in human pregnancy has not been established. Thus, CILNIBLU Tablets are not recommended during pregnancy.

#### Lactating Women

It is not known whether cilnidipine is secreted in breast milk. As a precautionary measure, it is advised that the nursing mother not breastfeed her child while on cilnidipine therapy. Accordingly, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

#### **Paediatric Patients**

Safety and efficacy of cilnidipine in paediatric patients has not been established. Thus, CILNIBLU Tablets are not recommended in children.

#### **Geriatric Patients**

In general, a lower starting dose is recommended in elderly patients given their greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease and/or other drug therapy. Dosage up-titration, if required, should be done with caution.

## 4.7Effect on Ability to Drive and Use Machines

For cilnidipine, studies have not been performed on effects on the ability to drive and use machines. Dizziness has been reported in patients with deceased blood pressure. It is advised not to operate machinery or drive a vehicle if patient experience drowsiness, dizziness, fatigue, headache or hypotension as side-effects of cilnidipine therapy.

#### **4.8Undesirable Effects**

Cilnidipine may cause following adverse reactions:

**General:** Edema (face, limb, etc.), facial flush, thickening of gums, heat sensation, lethargy, generalized fatigue, frequent urination, impotence, liver dysfunction, jaundice, thrombocytopenia (nose/gum bleeding), allergic reaction, etc.

**Gastrointestinal:** Nausea, vomiting, anorexia, stomach ache, gastrointestinal reflux disease (GERD).

Eye: Transient blindness, eye pain.

Musculoskeletal: Muscle ache, tremors.

Cardiovascular System: Hypotension, palpitations, ischemic chest pain.

Central Nervous System: Dizziness, headache, depression, cerebral ischemia.

Dermatological: Rashes, itching, photosensitivity.

#### 4.90verdose

In humans, experience with cilnidipine overdose is limited. Overdose symptoms include confusion, dizziness, headache, fatigue, and sedation. If overdose occurs, it might cause excessive peripheral vasodilation with marked hypotension.

If overdose should occur, initiate active cardiac and respiratory monitoring. Frequent blood pressure measurements are essential. Should hypotension occur, provide cardiovascular support including elevation of the extremities and judicious administration of fluids. If hypotension remains unresponsive to these conservative measures, consider administration of vasopressors (such as phenylephrine) with attention to circulating volume and urine output.

# 5. Pharmacological Properties

#### **5.1 Mechanism of Action**

Cilnidipine is a novel dihydropyridine class of calcium-channel blocker (CCB)/antagonist used for the management of hypertension. Cilnidipine inhibits the transmembrane influx of calcium ions (Ca<sup>++</sup>) into cardiac and vascular smooth muscle. However, it has greater selectivity for vascular smooth muscle. Antihypertensive action of cilnidipine is due to a direct relaxant effect on vascular smooth muscle. Cilnidipine has little or no action at the SA or AV nodes and negative inotropic activity is rarely seen at therapeutic doses. Like most of the other CCBs, cilnidipine acts on the L-type of calcium channels present on blood vessels.

Cilnidipine blocks entry of calcium ions and thus, suppresses contraction of blood vessels, thereby reducing blood pressure.

Cilnidipine possesses both, L- and N-type calcium channel blocking activity. Since N-type calcium channels are distributed along the sympathetic nerve endings and in the brain, cilnidipine exerts specific antisympathetic effect i.e., it inhibits the release of norepinephrine, a sympathomimetic hormone. Thus, cilnidipine reduces blood pressure which is associated with sympathetic overactivity.

## **5.2Pharmacodynamic Properties**

Cilnidipine is a calcium channel blocker class of antihypertensive agent. Cilnidipine decreases blood pressure safely and effectively without excessive blood pressure reduction or tachycardia. With chronic once daily oral administration of cilnidipine, antihypertensive effectiveness is maintained for about 24 hours.

# **5.3Pharmacokinetic Properties**

**Absorption:** After oral administration of cilnidipine, absorption is very rapid with peak plasma concentration reached after 2 hours.

**Distribution:** Distribution of cilnidipine tends to be higher in the liver as well as in kidneys, plasma, and other tissues. Cilnidipine has a large volume of distribution. Plasma protein binding of cilnidipine is very high i.e., 98% of the administered dose.

**Metabolism:** Cilnidipine is metabolized by both liver and kidney. It is rapidly metabolized by liver microsomes by a dehydrogenation process. The major enzymatic isoform involved in cilnidipine dehydrogenation of the dihydropyridine ring is CYP3A.

**Excretion:** Approximately 20% of the administered dose of cilnidipine gets eliminated through the urine, with the remainder (about 80%) being eliminated in feces.

# 6. Nonclinical Properties

#### 6.1 Animal Toxicology

No relevant information available.

# 7. Description

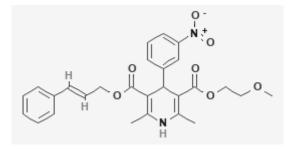
CILNIBLU 5 Tablets are White, circular, biconvex, Film coated Tablet, plain on both sides. CILNIBLU 10 Tablets are White, circular, biconvex, Film coated Tablet, plain on both sides. CILNIBLU 5 Tablets contains 5 mg of cilnidipine whereas CILNIBLU 10 Tablets contains 10 mg of cilnidipine for oral administration in adults.

Cilnidipine is a dihydropyridine calcium antagonist used in the management of hypertension. Cilnidipine appears as a light yellowish powder.

Molecular Weight: 492.5 g/mol.

Molecular Formula: C27H28N2O7.

Chemical Name: 3-O-(2-methoxyethyl) 5-O-[(E)-3-phenylprop-2-enyl] 2,6-dimethyl-4-(3-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylate. Structural Formula:



Inactive ingredients (excipients) of CILNIBLU 5 & 10 Tablets contain : Lactose, Microcrystalline Cellulose, Polyvinyl Pyrrolidone, Purified water,Magnesium Stearate,Talcum,Croscarmellose Sodium & Instacoat Aqua IA- III White.

# 8. Pharmaceutical Particulars

#### **8.1 Incompatibilities**

None known.

# 8.2Shelf-life

24 Months

## **8.3Packaging Information**

15 tablets per Blister.

# 8.4Storage and Handling Instructions

Store protected from light and moisture at a temperature not exceeding 30°C. Keep out of reach of children.

# 9. Patient Counseling Information

Administration Instructions to Patients

- Instruct patients to take this medicine exactly as prescribed by doctor. Do not change the dose or stop therapy without consulting doctor.
- Instruct patients to take CILNIBLU Tablets once a day, with or without food. It may be easier to take your dose if you do it at the same time every day, such as with breakfast or dinner, or at bedtime. Do not take more than one dose at a time.
- If patients miss a dose, they can take it as soon as they remember. Do not take if it has been more than 12 hours since the last missed dose. Wait and take the next dose at regular scheduled time.
- Pregnant women and lactating mothers should avoid use of this medicine.
- This medicine is not recommended for use in children.
- Patients should be informed that while taking this medicine, do not stop use of other prescription medicines, including any other blood pressure medicines, without consulting their doctor.

## **10. Details of Manufacturer**

AKUMS DRUGS & PHARMACEUTICALS LTD. Plot No. 26A-30, Sector-8A, I.I.E., SIDCUL, Ranipur, Haridwar – 249403 (Uttarakhand)

# 11. Details of Permission or License Number with Date

CILNIBLU 5 mg Tablets: Mfg. Lic. No. : 4/UA/LL/2014, Date of FDA Product Permission: 12/11/2018. CILNIBLU 10 mg Tablets: Mfg. Lic. No. : 4/UA/LL/2014, Date of FDA Product Permission: 12/11/2018

# 12. Date of Revision

April 2021.



# BLUE CROSS LABORATORIES PVT LTD.

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