

Brand Name: LOYOTA-500

Composition: levetiracetam injection IP

Dosage Form: Injection

Category: Antiepileptic / Anticonvulsant

Packaging Type: Vial Pack

PACKAGING: 5 ml

Brief Product Introduction:

LOYOTA-500 is a fast-acting antiepileptic injectable formulation manufactured by **AstraEureka Pharmaceutical**, a reliable **manufacturer of advanced injectable compositions**. It contains **Levetiracetam**, a broad-spectrum anticonvulsant used in the management of various types of seizures. LOYOTA-500 offers rapid control in acute seizure conditions and is ideal for situations where oral administration is not feasible.

Composition:

Each ml contains:

- Levetiracetam IP100 mg
- Water for Injection IPq.s.

Key Ingredients:

1. **Levetiracetam 100 mg/ml:** A pyrrolidone derivative used to treat epilepsy, offering a unique mechanism of action and minimal drug interactions.
2. **Water for Injection Q.S.:** Sterile diluent used to deliver the active drug safely and effectively.

Key Benefits:

1. Rapid seizure control in acute or emergency settings
2. Effective in both focal and generalized seizures
3. Minimal hepatic metabolism, making it safe for patients with liver dysfunction
4. Low potential for drug interactions
5. Can be used as monotherapy or adjunctive therapy

Indications:

1. Adjunctive therapy for partial-onset seizures with or without secondary generalization
2. Primary generalized tonic-clonic seizures
3. Myoclonic seizures in juvenile myoclonic epilepsy
4. Acute seizure episodes when oral administration is not possible
5. Status epilepticus (as per clinical protocol)

Directions for Use:

1. To be administered only under medical supervision
2. For **intravenous use** only
3. Must be diluted before infusion
4. Administer over a recommended infusion time (15 minutes)
5. Use aseptic precautions during preparation and administration

Dosage and Administration:

1. **Adult Dose:** Typically 500 mg to 1500 mg twice daily based on clinical need
2. **Pediatric Dose:** As per body weight and physician's recommendation
3. **Route:** Intravenous infusion
4. **Infusion Duration:** Over 15 minutes
5. **Conversion to Oral Therapy:** Equivalent IV and oral doses may be used interchangeably

Safety Information:

1. Dose adjustment required in renal impairment
2. Monitor mood and behavioral changes in long-term use
3. Not to be used as a substitute for comprehensive epilepsy care
4. Do not administer undiluted
5. Use with caution in patients with history of psychiatric disorders

Mechanism of Action:

- Levetiracetam exerts its antiepileptic effects by binding to the **synaptic vesicle protein 2A (SV2A)** in the brain.
- This interaction modulates neurotransmitter release and stabilizes neuronal activity. Unlike traditional antiepileptic drugs, levetiracetam does not affect sodium channels or GABAergic activity directly, which contributes to its unique safety and pharmacokinetic profile.
- It has rapid onset and does not require titration in emergencies.

Contraindications:

1. Known hypersensitivity to Levetiracetam or any component of the formulation
2. Severe renal impairment without appropriate dose adjustments
3. Not indicated as a first-line treatment in patients with primary psychiatric conditions

Side Effects:

1. Common: Drowsiness, dizziness, headache, fatigue
2. Less Common: Mood changes, anxiety, agitation
3. Rare: Suicidal thoughts, behavioral disturbances, allergic reactions
4. Infusion-related: Local irritation or phlebitis at injection site

Important Notice:

- This is a **prescription-only medication** to be used under a physician's guidance
- Do not self-administer
- Not intended for long-term monotherapy unless advised
- Regular monitoring of renal function is recommended
- Avoid abrupt discontinuation to prevent seizure recurrence

Storage Condition:

1. Store below 25°C
2. Protect from light and moisture
3. Do not freeze
4. Use immediately after dilution
5. Keep out of reach of children

Packing Information:

- Each pack contains **1 vial of 5 ml.**
- Supplied in sterile glass vials sealed for single-use.

