## **Aclonist 500 Injection**

Acyclovir (500 mg) Injection: Product Information

**Brand Name**: Acyclovir **Generic Name**: Acyclovir **Strength**: 500 mg per vial

**Dosage Form**: Injection (Intravenous)

**Indications**: Acyclovir 500 mg injection is used for the treatment of severe or complicated viral infections caused by the herpes simplex virus (HSV) and varicellazoster virus (VZV), particularly in immunocompromised patients. These include:

- Herpes Simplex Virus Infections:
  - o Severe or complicated genital herpes
  - o Herpes simplex encephalitis
  - Neonatal herpes simplex infections
- Varicella-Zoster Virus Infections:
  - Severe cases of shingles (herpes zoster)
  - Severe chickenpox in immunocompromised patients

Acyclovir injection is typically used for serious infections that require rapid and high concentrations of the drug, particularly when oral therapy is not feasible or the infection is severe.

Mechanism of Action: Acyclovir is an antiviral medication that inhibits viral DNA replication. It is converted into its active form (acyclovir triphosphate) within infected cells by viral thymidine kinase and cellular enzymes. This active form inhibits DNA polymerase, preventing viral DNA synthesis and halting viral replication. Acyclovir thus reduces the severity and duration of the infection.

**Dosage and Administration**: Acyclovir 500 mg injection is typically administered by intravenous (IV) infusion. The dosage will vary depending on the severity of the infection, the patient's renal function, and other clinical factors. Below are general guidelines for dosing:

- For Herpes Simplex Encephalitis:
  - Initial dose: 10 mg/kg IV every 8 hours for 10 days.
- For Severe Herpes Simplex or Varicella-Zoster Virus Infections in Immunocompromised Patients:
  - o Initial dose: 5 to 10 mg/kg IV every 8 hours.
- For Shingles (Herpes Zoster):
  - 5 to 10 mg/kg IV every 8 hours, depending on the severity of the condition.
- For Neonatal Herpes Simplex:
  - o 20 mg/kg IV every 8 hours for 21 days.

**Note**: The exact dose and duration will be determined by a healthcare professional based on the patient's specific needs and condition. The infusion should be administered over at least 1 hour to minimize the risk of renal toxicity.

Contraindications: Acyclovir 500 mg injection should not be used in patients with known hypersensitivity to acyclovir, valacyclovir (its prodrug), or any of its ingredients. It should also be avoided in patients with a history of severe allergic reactions to similar antiviral medications.

## Warnings and Precautions:

- Renal Impairment: Acyclovir is primarily excreted by the kidneys. Use with caution in patients with renal dysfunction, as it can accumulate and cause kidney toxicity. Dose adjustments may be required for patients with renal impairment.
- Hydration: Adequate hydration is essential during treatment, especially in patients with renal problems, to reduce the risk of nephrotoxicity.
  Proper hydration can help prevent the formation of acyclovir crystals in the kidneys.
- **Neurotoxicity**: High doses or rapid infusion rates may increase the risk of neurotoxicity, including confusion, agitation, tremors, and

- seizures, especially in patients with renal impairment.
- Pregnancy and Lactation: Acyclovir is classified as a pregnancy category C medication. It should only be used during pregnancy if the potential benefits outweigh the risks. It is excreted in breast milk, so caution should be used when administering it to breastfeeding mothers.

**Side Effects**: Common side effects of Acyclovir 500 mg injection may include:

- Nausea or vomiting
- Headache
- Diarrhea
- Fatigue
- Pain or swelling at the injection site

Less common but more serious side effects may include:

- Kidney problems: Changes in urine output, discomfort or pain during urination.
- Neurological issues: Seizures, confusion, or hallucinations, particularly in patients with kidney problems or those receiving high doses.
- **Severe allergic reactions**: Difficulty breathing, swelling of the face or throat, hives, or rash.

If any of these serious side effects occur, medical attention should be sought immediately.

**Drug Interactions**: Acyclovir may interact with other medications, including:

- **Probenecid**: Can increase acyclovir levels in the blood, potentially leading to toxicity.
- **Cimetidine**: May slow the elimination of acyclovir.
- Other nephrotoxic agents: Increased risk of kidney damage when combined with other drugs that affect kidney function (e.g., NSAIDs, certain antibiotics).

Always inform your healthcare provider about all medications you are currently taking, including over-the-counter drugs, herbal supplements, and vitamins.

**Storage**: Acyclovir 500 mg injection should be stored at room temperature (15°C to 25°C / 59°F to 77°F). The vial should be protected from light, and any unused portion should be disposed of according to healthcare provider guidelines.

## **Patient Counseling Information:**

- Ensure that you are adequately hydrated during the treatment to minimize the risk of kidney damage.
- Report any new or unusual symptoms, especially if you experience confusion, seizures, or signs of an allergic reaction.
- Inform your doctor if you have any kidney issues or are on other medications that affect renal function.
- Acyclovir does not cure herpes or chickenpox but can help reduce the severity and duration of the symptoms.

This is a general overview of Acyclovir 500 mg injection. Always consult your healthcare provider for personalized advice and detailed instructions on the proper use of this medication.

Manufactured in India for:



(An ISO 9001: 2015 Certified Co.)

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