

Merotyle 250 Injection

Product Information: Meropenem (250 mg) Injection

Composition

- **Meropenem: 250 mg per vial as a sterile powder for reconstitution for intravenous (IV) use.**
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Pharmacological Class

- **Class: Carbapenem antibiotic (β -lactam class).**
 - **Mechanism of Action: Meropenem works by inhibiting bacterial cell wall synthesis through binding to penicillinbinding proteins (PBPs), leading to bacterial cell lysis. It is bactericidal against a wide spectrum of Grampositive, Gram-negative, and anaerobic bacteria.**
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Indications

Meropenem (250 mg) is used to treat the following serious bacterial infections:

1. **Intra-abdominal Infections: Peritonitis, abscesses, and other complex abdominal infections.**
2. **Skin and Soft Tissue Infections: Complicated skin and soft tissue infections.**
3. **Pneumonia: Community-acquired and hospital-acquired pneumonia, including ventilator-associated pneumonia (VAP).**

4. **Urinary Tract Infections (UTIs): Complicated UTIs, including pyelonephritis.**
 5. **Septicemia (Bacteremia): Bloodstream infections caused by susceptible organisms.**
 6. **Meningitis: Bacterial meningitis caused by sensitive organisms.**
 7. **Febrile Neutropenia: Empiric therapy for patients with febrile neutropenia, often in cancer patients undergoing chemotherapy.**
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Dosage and Administration

- **Recommended Dosage:**
 - **Adults: Typically, 250 mg every 8 hours for moderate infections. The dosage may be increased depending on infection severity and patient condition.**
 - **Pediatric Patients (≥ 3 months): The dosage is based on body weight, typically 20-40 mg/kg every 8 hours (maximum: 2 g/day).**
 - **Route of Administration: Intravenous (IV) infusion or IV bolus.**
 - **For IV infusion: Reconstitute the powder with 10 mL sterile water for injection and further dilute for infusion. Infuse over 15-30 minutes.**
 - **For IV bolus: Reconstitute with sterile water and inject over 3-5 minutes.**
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Contraindications

- **Hypersensitivity to Meropenem or any other carbapenem antibiotic or β -lactam**

agents (such as penicillins or cephalosporins).

Severe hypersensitivity reactions:
Anaphylaxis, rash, angioedema.

Warnings and Precautions

1. **Hypersensitivity Reactions:** Serious allergic reactions such as anaphylaxis may occur. Use with caution in patients with a history of hypersensitivity to β -lactam antibiotics.
2. **Clostridium difficile-associated Diarrhea:** Risk of pseudomembranous colitis with prolonged use. Monitor for symptoms such as diarrhea, abdominal cramping, and fever.
3. **Renal Impairment:** Dose adjustments are required in patients with impaired renal function. Close monitoring of renal function is recommended.
4. **CNS Effects:** Seizures may occur, particularly with high doses or in patients with pre-existing central nervous system disorders or renal failure.
5. **Superinfection:** Prolonged use may result in superinfections, including fungal or resistant bacterial infections.

Adverse Effects

- **Common:** Nausea, vomiting, diarrhea, headache, rash, fever, and phlebitis or pain at the injection site.
- **Serious:**
 - Seizures (especially in patients with renal impairment).
 - Hematological effects: Thrombocytopenia, neutropenia, eosinophilia. ○

Drug Interactions

- **Probenecid:** Increases the plasma concentration of Meropenem by inhibiting renal clearance.
- **Valproic Acid:** Concomitant use may reduce plasma concentrations of valproic acid, increasing the risk of seizures.
- **Other Antibiotics:** Caution is advised when using with other antibiotics, as synergistic or antagonistic interactions may occur.

Storage Instructions

- Store below 25°C (room temperature), away from direct sunlight and moisture.
- After reconstitution, the solution should be used immediately or stored for up to 6 hours at room temperature.
- Discard any unused portion to maintain sterility.

Clinical Benefits

- **Broad Spectrum:** Effective against a wide range of Gram-positive, Gram-negative, and anaerobic organisms.
- **Effective in Critical Infections:** Ideal for treating severe, life-threatening infections, particularly in hospitalized or immunocompromised patients.
- **Reduced Resistance Risk:** Meropenem's ability to resist breakdown by most β -lactamases makes it a valuable option against resistant bacterial strains.

Packaging

- **Supplied in single-dose vials containing 250 mg of Meropenem as a sterile powder for reconstitution.**

Meropenem (250 mg) Injection is a broadspectrum antibiotic that is highly effective in treating serious infections caused by a variety of bacteria. It is a first-line therapy for lifethreatening conditions and should be administered by healthcare professionals.

Manufactured in India for:



Cafoli Lifecare Pvt. Ltd.

(An ISO 9001: 2015 Certified Co.)

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