

Merotyle 1 GM Injection

Product Information: Meropenem (1000 mg) + Sulbactam (500 mg) Injection

Composition

- **Meropenem: 1000 mg**
 - **Sulbactam: 500 mg**
 - **Formulation Type: Sterile powder for reconstitution for intravenous (IV) infusion.**
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Pharmacological Class

- **Class: Carbapenem + Beta-lactamase Inhibitor combination.**
 - **Mechanism of Action:** ○ Meropenem: Inhibits bacterial cell wall synthesis by binding to penicillin-binding proteins (PBPs), leading to bacterial cell lysis. It is bactericidal against a wide range of Gram-positive, Gram-negative, and anaerobic bacteria. ○ Sulbactam: A beta-lactamase inhibitor that protects meropenem from degradation by betalactamases produced by resistant bacteria, enhancing its activity against beta-lactamase-producing organisms.
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Indications

This combination of Meropenem and Sulbactam is used for the treatment of the following serious bacterial infections:

1. **Intra-abdominal Infections (e.g., peritonitis, abscesses)**

2. **Complicated Skin and Soft Tissue Infections**
 3. **Pneumonia (including ventilator-associated pneumonia)**
 4. **Septicemia (including bacteremia)**
 5. **Complicated Urinary Tract Infections**
 6. **Gynecological Infections**
 7. **Febrile Neutropenia: In patients with low white blood cell counts, often as empiric therapy.**
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Dosage and Administration

- **Recommended Dosage:**
 - **Adults: 1 g of Meropenem + 500 mg of Sulbactam every 8 hours, depending on infection severity.**
 - **Pediatric Patients: Dosage is adjusted based on body weight and infection severity; typically, 20-40 mg/kg of Meropenem (with appropriate Sulbactam dose) every 8 hours.**
 - **Route of Administration: Intravenous (IV) infusion.**
 - **Reconstitute the powder with 10 mL sterile water for injection for IV bolus or dilute further for IV infusion.**
 - **Administer via IV infusion over 30 minutes.**
 - **Alternatively, for slow IV injection, administer over 3-5 minutes.**
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Contraindications

- **Hypersensitivity to Meropenem, Sulbactam, other carbapenems, or betalactam antibiotics (penicillins, cephalosporins).**
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Warnings and Precautions

1. **Allergic Reactions:** May cause severe allergic reactions, including anaphylaxis, especially in patients with a history of penicillin allergy.
 2. **Clostridium difficile-associated Diarrhea:** Risk of pseudomembranous colitis with extended use. Monitor for symptoms of gastrointestinal distress.
 3. **Renal Impairment:** Dose adjustments are required in patients with renal dysfunction. Monitor renal function closely.
 4. **Seizures:** Risk of seizures, particularly in patients with CNS disorders or renal impairment.
 5. **Superinfection:** Prolonged use may lead to fungal or bacterial superinfections, including resistant organisms.
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Adverse Effects

- **Common:** Nausea, vomiting, diarrhea, headache, rash, and injection site reactions.
- **Serious:**
 - Seizures, especially with high doses or renal impairment.
 - Hematological reactions: Thrombocytopenia, neutropenia, eosinophilia.
 - Allergic reactions: Rash, pruritus, fever, and rarely anaphylaxis.

Drug Interactions

- **Probenecid:** Can increase the plasma concentration of Meropenem by inhibiting renal clearance.
 - **Valproic Acid:** Concurrent use may reduce the effectiveness of valproic acid, increasing the risk of seizures.
 - **Other Antibiotics:** Use with caution when combining with other antibiotics, as synergistic or antagonistic effects may occur.
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Storage Instructions □ **Store at room**

temperature (below 30°C).

- **Protect from direct sunlight and moisture.**
 - **Reconstituted solution should be used immediately or stored under appropriate conditions (usually 6 hours at room temperature) if not used right away.** □ **Discard any unused portion.**
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Clinical Benefits

- **Broad-spectrum activity:** Meropenem + Sulbactam offers enhanced efficacy against both Gram-positive and Gram-negative organisms, including those producing beta-lactamase.
- **Effective for serious infections:** This combination is particularly beneficial in managing severe, hospital-acquired infections and in critically ill patients.
- **Beta-lactamase protection:** The addition of Sulbactam helps overcome resistance mechanisms by inhibiting bacterial betalactamases, thus extending the spectrum of Meropenem's activity.

Packaging

- Supplied in single-dose vials containing 1 g Meropenem + 500 mg Sulbactam as a sterile powder.
- Available in packs with single-use vials for hospital use.

Meropenem (1000 mg) + Sulbactam (500 mg) Injection is a potent antibiotic combination designed for the treatment of severe, multidrug resistant bacterial infections. It is crucial for patients with infections that are unresponsive to other antibiotics, especially in hospital settings. Administer under the supervision of a healthcare professional.

Manufactured in India for:



Cafoli Lifecare Pvt. Ltd.

(An ISO 9001: 2015 Certified Co.)

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