

Meropenem 1.5 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 beta-lactamases 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 beta-lactam 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.
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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 beta-lactamases, thus extending the spectrum of Meropenem's activity.
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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.**
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Meropenem (1000 mg) + Sulbactam (500 mg) Injection is a potent antibiotic combination designed for the treatment of severe, multi-drug 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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