meropenem

Warnings	Classification	Alternate Names
	Beta-lactam, carbapenem antibiotic	MERREM

Indications

- treatment of documented or suspected infections involving multi-drug resistant organisms
- indications and/or prescribing restrictions apply

Reconstitution and Stability

- store vials, inactivated minibag plus, and multi-chamber bags (DUPLEX containers) at room temperature
- if using vial: reconstitute with sterile water for injection (SWFI) as follows:
  - 500 mg vial: add 10 mL to provide 50 mg/mL solution
  - 1 g vial: add 20 mL to provide 50 mg/mL solution
  - reconstituted vials are **stable for 3 hours** at room temperature
- solutions diluted in sodium chloride 0.9% are stable for 12 hours at room temperature
- solutions diluted in dextrose 5% should be used immediately
- DUPLEX container: after activation, stable for 1 hour at room temperature (15 hours if refrigerated)
- minibag plus: administer medication immediately following activation

Compatibility

- compatible with sodium chloride 0.9% (preferred), dextrose 5%

Preparation and Administration

Administration Route	Approved	Preparation and Administration Instructions	Required Monitoring
Subcutaneous	NO		
Intramuscular	NO		
IV direct	YES	no further dilution; give slowly over 3 to 5 minutes	Basic Monitoring
IV intermittent	YES	*preferred route* dilute doses: ○ 500 mg in 50 mL ○ 1000 mg in 50 mL ○ 2000 mg in 100 mL administer over 15 to 30 minutes if requested, may be administered over 3 hours in select critically ill patients	Basic Monitoring
Continuous IV infusion	NO		

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Dosage

- usual: 500 mg IV Q6H
- obstetrics: 1000 mg IV Q8H
- meningitis or cystic fibrosis: 2000 mg IV Q8H

- dose adjustment necessary for renal dysfunction:

Creatinine Clearance	Dose	
	usual	meningitis or cystic fibrosis
26 to 50 mL/minute	500 mg IV Q8H	2000 mg IV Q12H
10 to 25 mL/minute	500 mg IV Q12H	1000 mg IV Q12H
less than 10 mL/minute	500 mg IV Q24H	1000 mg IV Q24H
hemodialysis	500 mg IV Q24H given after dialysis on dialysis days	1000 mg IV Q24H given after dialysis on dialysis days
continuous ambulatory peritoneal dialysis	500 mg IV Q24H	1000 mg IV Q24H

Potential Hazards of Parenteral Administration

- inflammation at injection site, phlebitis/thrombophlebitis
- anaphylaxis
    - *during administration, resuscitation equipment and emergency drugs should be readily available*

Important Implications

Contraindications/Cautions
- contraindicated if allergy to other carbapenem antibiotics (e.g. imipenem-cilastatin, ertapenem)
- Pregnancy/Lactation: refer to Lexicomp or Micromedex

Side effects
- headache, seizures
- rash, pruritus
- diarrhea, nausea/vomiting, constipation
- anemia

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