OTHER NAMES
Merrem

CLASSIFICATION
Antibiotic - carbapenem, β lactam

ALLERGY ALERT
See Contraindications/Cautions

INDICATIONS FOR IV USE
HEALTH CANADA APPROVED
• Treatment of various infections due to susceptible organisms, including the following: lower respiratory tract, skin and soft tissue, intra-abdominal, gynaecological, meningitis and bacteraemia.

SPECTRUM OF ACTIVITY:
gram positive: most gram positive organisms except E. faecium and methicillin-resistant Staphylococcus.
gram negative: most gram negative aerobic organisms including Pseudomonas and Burkholderia cepacia. Poor activity vs. Stenotrophomonas maltophilia.
anaerobes: most anaerobes including Bacteroides and Clostridium.

CONTRAINDICATIONS
➢ Hypersensitivity to meropenem.

CAUTIONS
➢ Hypersensitivity to penicillins, cephalosporins or other β lactam antibiotics, e.g. imipenem.
• Compromised renal function and/or CNS lesions; potential to cause seizures.¹

PREGNANCY/BREAST FEEDING: Contact pharmacy for most recent information.

ADMINISTRATION

<table>
<thead>
<tr>
<th>MODE</th>
<th>DIRECT INTO IV TUBING</th>
<th>INTERMITTENT INFUSION</th>
<th>CONTINUOUS INFUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO MAY GIVE</td>
<td>All registered nurses</td>
<td>All registered nurses</td>
<td>All registered nurses</td>
</tr>
<tr>
<td>ADULT</td>
<td>Over 3 - 5 minutes.³</td>
<td>Dilute in 50 - 100 mL minibag; <strong>NS preferred.</strong> Infuse over 15 - 30 minutes.</td>
<td>Dilute ½ the daily dose in 500 mL NS and infuse over 12 hours.</td>
</tr>
<tr>
<td>PAEDIATRIC</td>
<td>As above.³</td>
<td>See Syringe pump infusion table.</td>
<td>No information</td>
</tr>
<tr>
<td>NEONATE</td>
<td>No information</td>
<td>Over 30 minutes⁴</td>
<td>No information</td>
</tr>
</tbody>
</table>

MONITORING
REQUIRED
• None
RECOMMENDED
• None

RECONSTITUTION
• Available as meropenem 500 mg and 1 g vials.
• Vials may be reconstituted with sterile water, NS or D5W.³ A reconstitution device may be used.
• Volume of diluent required may vary with brand. See vial for exact volume of diluent and resulting concentration.
COMPATIBILITY/STABILITY
- Compatible with dextrose, saline, dextrose-saline combinations, Ringer's and lactated Ringer's solution.
- Vials reconstituted with sterile water or NS are stable for 2 hours at room temperature and at least 12 hours in the refrigerator.
- Vials reconstituted with D5W are stable for 1 hour at room temperature and 8 hours in the refrigerator.
- Stable in NS at conc. of 1 - 5 mg/mL for 24 hours at room temperature and at least 24 hours in the refrigerator. Stable in NS, at room temperature, at conc. of 10 mg/mL for 20 hours; at conc. of 50 mg/mL for 8 hours. Stability is concentration and temperature dependent.
- Stable in D5W (1 - 50 mg/mL) for at least 3 hours at room temperature and at least 24 hours in the refrigerator. Stability is concentration and temperature dependent.
- For drug-drug compatibility, contact Drug Information.

ADVERSE EFFECTS
LOCAL REACTIONS
- Inflammation at injection site, thrombophlebitis.

HYPERSENSITIVITY
- Anaphylaxis, including bronchospasm and hypotension (rare).
- Urticaria, pruritus.

GASTROINTESTINAL
- Nausea and vomiting, diarrhoea.
- Pseudomembranous colitis (rare).

MISCELLANEOUS
- Headache, rash.
- Seizures (incidence appears less than with imipenem).

DOSE
ADULT
- 500 mg - 1 g every 8 hours, depending on severity of infection.¹
- 2 g every 8 hour for meningitis.¹
- Has been given by continuous infusion in critically ill patients and in cystic fibrosis. Stability in solution is concentration and temperature dependent.

ELDERLY
- No dosage adjustment is necessary for elderly patients with normal (for their age) renal function.¹

PEDIATRIC
Infants over 3 months and children:
- Mild to moderate infections: 60 mg/kg/day divided every 8 hours. Max: 3 g/24 hours
- Meningitis and severe infections: 120 mg/kg/day divided every 8 hours. Max 6 g /24 hours.

NEONATE
- Sepsis: 20 mg/kg/dose every 12 hours.
- Meningitis and infections caused by Pseudomonas species: 40 mg/kg/dose every 8 hours.

RENAL IMPAIRMENT ADJUSTMENTS

<table>
<thead>
<tr>
<th>Creatinine Clearance/GFR (mL/min)</th>
<th>Dose</th>
<th>Dosing interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 – 50</td>
<td>Recommended dose</td>
<td>Every 12 hours</td>
</tr>
<tr>
<td>10 – 25</td>
<td>½ recommended dose</td>
<td>Every 12 hours</td>
</tr>
<tr>
<td>Less than 10</td>
<td>½ recommended dose</td>
<td>Every 24 hours</td>
</tr>
</tbody>
</table>

HEPATIC IMPAIRMENT ADJUSTMENTS
- None required as long as renal function is normal.¹

HEMO/PERITONEAL DIALYSIS
- Meropenem is removed by haemodialysis, give dose after dialysis.⁷
- CAPD: ½ recommended dose every 24 hours.⁷

MISCELLANEOUS
- IM or SC use: no information available at this time.
MEROPENEM - REFERENCES


