

# Meropenem

<b>Indication</b>	Severe aerobic and anaerobic Gram-positive and Gram-negative infections
<b>Dose</b>	<p>&lt;7 days            20mg/kg 12 hourly                  ≥7 to 1 month    20mg/kg 8 hourly                  ≥1 month            10-20mg/kg 8 hourly</p> <p>Increase dose to 40mg/kg in severe infection e.g. meningitis or if indicated by microbiology</p>
<b>Route of administration</b>	Intravenous infusion over 15-30 minutes
<b>To prepare</b>	<p>500mg vial – powder for reconstitution                  1g vial – powder for reconstitution</p> <p><b>Different brands of meropenem have different displacement volumes. Please check your specific brand for instructions on preparing.</b></p> <p><b>Preferred diluent:</b> water for injection</p> <p><b>To make 50mg/mL:</b>                  For a 500mg vial – Calculate the volume of diluent needed by subtracting the <i>brand</i> specific displacement volume from 10mL. Add that volume of diluent to the vial and withdraw the required dose.</p> <p>e.g. for Sandoz meropenem 500mg vial, the displacement volume is 0.5mL – therefore you should add 9.5mL of diluent to the vial.</p>
<b>Compatibilities</b>	Glucose 5%, sodium chloride 0.9%, alprostadil, caffeine citrate, dopamine, dobutamine, fluconazole, furosemide, gentamicin, heparin, metronidazole, midazolam, milrinone, morphine sulphate, propofol, vancomycin.
<b>Known incompatibilities</b>	Aciclovir, amphotericin B, calcium gluconate, sodium bicarbonate, zidovudine
<b>Notes</b>	<p>In renal impairment use the following dosing adjustments:</p> <ul style="list-style-type: none"> <li>- eGFR 26-50mL/minute/1.73m<sup>2</sup> = normal dose every 12 hours</li> <li>- eGFR 10-25mL/minute/1.73m<sup>2</sup> = half normal dose every 12 hours</li> <li>- eGFR &lt;10mL/minute/1.73m<sup>2</sup> = half normal dose every 24 hours</li> </ul> <p>If there is no compatibility information for specific drugs, do not assume compatibility. For incompatible drugs or those with no compatibility information use a separate line or, for short infusions, flush well between drugs.</p> <p>For side-effects see the BNFc.</p>
<b>References</b>	Leeds Teaching Hospitals neonatal prescribing and administration monograph, Bradford Teaching Hospitals neonatal formulary, Handbook on Injectable Drugs Trissel et al, BNFc, Medusa.

Date produced: March 2019    Review date: March 2022    Author: Laura Dalton, Network Leadership Fellow  
 Produced by Yorkshire and Humber Neonatal Operational Delivery Network.  
 Clinicians must accept individual responsibility for using this information and prescribing safely.