Meropenem

INDICATION

Treatment of both aerobic and anaerobic gram positive and gram negative infections on the advice of microbiology.
Remember to prescribe fungal prophylaxis

DOSE RANGE

AGE	DOSE	FREQUENCY	ROUTE
< 7 days	40mg/kg/dose*	12 hourly	IV
≥ 7 days	40mg/kg/dose*	8 hourly	IV

***Dose may be reduced to 20mg/kg/dose at consultant discretion.**

FORM

500mg vial containing dry powder

RECONSTITUTION

Meropenem 50mg/ml solution:

Reconstitute each 500mg vial with 9.5ml water for injections and shake well to mix. Further dilution is **not** required, however the solution may be diluted if the required dose is difficult to measure or if vein irritation occurs.

DILUTION

Meropenem 5mg/ml solution:

Add 1ml of the 50mg/ml solution to 9ml of sodium chloride 0.9% and shake well to mix until the solution is clear. Alternatively, glucose 5% or 10% may be used for this dilution.

METHOD OF ADMINISTRATION

IV injection: Administer by slow IV bolus over 5 minutes. This should be used for 20mg/kg/dose.

IV infusion: Administer by IV infusion over 30 minutes. Flush the giving set with sodium chloride 0.9% before disconnecting to ensure the total dose is given. This should be used for 40mg/kg/dose.

COMPATIBILITY

Solution compatibility	Sodium chloride 0.9%, glucose 5%, glucose 10%
Solution incompatibility	All other fluids
IV drug compatibility	Dexamethasone, dopamine, fluconazole, furosemide, gentamicin, heparin, linezolid, magnesium sulfate, morphine sulfate, potassium chloride
IV drug incompatibility	Aciclovir, amphotericin, calcium gluconate, zidovudine.

THIS LIST IS NOT EXHAUSTIVE PLEASE CONTACT PHARMACY FOR FURTHER INFORMATION ON COMPATIBILITY WITH ANY MEDICINES NOT INCLUDED

SPECIAL MONITORING REQUIREMENTS

Monitor for inflammation, thrombophlebitis or pain at the site of injection.

Monitor liver function as increases in serum concentrations of bilirubin, transaminases, alkaline phosphatase and lactic dehydrogenase alone or in combination have been reported.

Monitor renal function, as dosage interval adjustment is required in severe renal failure.

Monitor full blood count for signs of reversible thrombocythaemia, eosinophilia, thrombocytopenia, leucopenia and neutropenia (including very rare cases of agranulocytosis). A positive direct or indirect Coombs test may develop in some subjects.

Monitor for signs of candidiasis.

FURTHER INFORMATION

Cautions/ Contraindications	Avoid if history of **immediate** hypersensitivity reaction to beta-lactam antibacterials. Use with caution in patients with sensitivity to beta-lactam antimicrobials.
Side effects	Abdominal pain, diarrhoea, headache, inflammation, nausea, pain, skin reactions, thrombocytosis, vomiting
Storage	Use reconstituted intravenous solutions immediately, do not store. Store unopened vials in IV drug cupboard.
APPLICABLE LINKS	BNFc Summary of Product Characteristics (SPC)

Prepared by	Rakhee Vasishta	Checked by	Caroline O'Hare
Date approved by NNU Pharmacy Group	July 2023	Review date	3 years

Administer reconstituted solutions immediately.
All vials, ampoules and infusion bags are for single use only unless otherwise stated.
Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications.
This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.