Daptomycin Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- **Not effective for pneumonia**
- See **monitoring** requirements
- See under 'Dose' for adjustments required in **renal impairment**
- Restricted to micro/ID advice only **(Red-light antimicrobial)**

Available preparations

Daptomycin 350mg vial (Accordpharma)

Daptomycin 500mg vial (Accordpharma)

Cubicin 350mg vial

Cubicin 500mg vial

Reconstitution

Sodium chloride 0.9% ONLY

- 7ml per 350mg vial, 10ml per 500mg vial
- GENTLY ROTATE the vial to ensure complete wetting of the product
- Allow to **stand for 10 minutes**
- Finally, the vial should be **GENTLY** rotated/swirled for a few minutes as needed to obtain a clear reconstituted solution
- **Vigourous** shaking/agitation should be **avoided** to prevent foaming of the product
- Reconstitution is normally complete within 15 minutes

Infusion fluids

Sodium chloride 0.9%

Methods of intravenous administration

Intermittent intravenous infusion

- Add required dose to 50ml infusion fluid and administer over 30 minutes
- The residual volume in the infusion line must be flushed through at the same rate to avoid significant underdosing

Slow intravenous injection

- Administer over 2 minutes (**only if infusion is not possible** as studies conducted in healthy subjects only)

Dose in adults

Usual dose: This is a red light agent which should only be prescribed after consultation with ID or Micro and doses should be in accordance with ID/Micro advice.

Complicated skin and soft tissue infections

- Give 4 to 6mg/kg every 24 hours
- Treat for seven to fourteen days, or until infection is resolved

Other indications (osteomyelitis, septic arthritis, infective endocarditis and bacteraemia) [ref 1]

- Higher doses may be required (6mg/kg to 10mg/kg) every 24 hours - only on the direct instruction of ID or Micro
- Doses of up to 10mg/kg per day may be prescribed. This would be consistent with IDSA guidelines for the treatment of blood-borne staph aureus or infective endocarditis for example [ref 1]

Renal impairment

- Use with caution in patients with renal impairment (eGFR <80ml/min/1.73m^2), due to limited clinical experience.
- Monitor renal function and CPK closely

eGFR less than 30ml/minute/1.73m^2	Skin and soft tissue infections	Give the ID/Micro recommended dose every 48 hours[ref 3]
	Other indications	Give the ID/Micro recommended dose every 48 hours[ref 3]
Renal replacement therapy	Consult pharmacy or specialist literature sources See GAPP also	

Hepatic impairment

- Use with caution in patients with severe hepatic insufficiency (due to lack of data)

Monitoring

- **Plasma CPK** should be measured at baseline and at least **once-weekly** during therapy in all patients
- Plasma CPK should be measured **more frequently in patients at risk of myopathy** e.g. where eGFR is less than 80ml/minute/1.73m2 or where the patient is on other medication which has also been associated with myopathy e.g. **statins, fibrates or ciclosporin**
- Patients should be reviewed regularly while on therapy for any signs or symptoms that might represent myopathy. Any patient that develops unexplained muscle pain, tenderness, weakness or cramps should have CPK levels monitored every 2 days. Daptomycin should be discontinued in the presence of unexplained muscle symptoms if the CPK level reaches greater than 5 times upper limit of normal
- Patients with eGFR less than **80ml/minute/1.73m2** require close monitoring of renal function and clinical response. Use only if benefit outweighs risk
- Monitor renal function regularly in all patients on concomitant nephrotoxins e.g. NSAIDs

Further information

- Daptomycin should not be administered to patients who are taking **other medications associated with myopathy** unless it is considered that the benefit to the patient outweighs the risk;
- **Daptomycin may cause false prolongation of the PT and increase of INR with certain recombinant thromboplastin reagents. This appears to be a dose-dependent phenomenon.**

Minimise likelihood/magnitude by taking blood sample immediately before daptomycin dose. Consider measuring PT/INR using non-thromboplastin reagents (if available) (ref 2)

- Daptomycin dose may be **rounded down to the nearest vial** where recommended by Micro/ID/Pharmacy (document available on Medinfogalway to logged in Pharmacist users)

Storage

Store between 2 and 8^{0}C

References

Cubicin SPC 15/9/21

1. Clinical Practice Guidelines by the Infectious Diseases Society of America for the Treatment of Methicillin-Resistant Staphylococcus aureus Infections in Adults and Children .Clinical Infectious Diseases, Volume 52, Issue 3, 1 February 2011, Pages e18-e55, https://doi.org/10.1093/cid/ciq146

2: Drugs.com

3: GUH antimicrobial guidelines 2021 - renal dosing section

Search Synonym Cubicinâ¢

Therapeutic classification

Lipopeptide antibiotic

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