

Clindamycin IV

Currently marketed formulations of clindamycin IV¹:

DIN	Company	Product	A.I. Name	Strength
<u>0238571</u>	SANDOZ	CLINDAMYCIN INJECTION 2 & 4 ml amps	CLINDAMYCIN PHOSPHATE	150 MG / ML
<u>02230535</u>	SANDOZ	CLINDAMYCIN INJECTION 60 & 120 ml	CLINDAMYCIN PHOSPHATE	150 MG / ML
<u>02230540</u>	SANDOZ	CLINDAMYCIN INJECTION 2, 4 & 6 ml	CLINDAMYCIN PHOSPHATE	150 MG / ML
<u>00260436</u>	PFIZER	DALACIN C PHOSPHATE 2, 4, 6 & 60 ml	CLINDAMYCIN PHOSPHATE	150 MG / ML

Indications for IV clindamycin²

- Severe infections caused by susceptible strain of gram positive staphylococci, streptococci (except *E. faecalis*), pneumococci and anaerobic bacteria when oral therapy is not feasible:
- Bacterial endocarditis prophylaxis

Considerations when choosing alternative:

- Clindamycin should be used IV ONLY if patient is NPO as oral absorption is excellent.²
- Clindamycin is often an alternative to penicillins and cephalosporins for beta-lactam allergies.^{3,4} **Ensure there is a valid rationale for avoiding first line penicillins and cephalosporins. Recent information suggests there is very limited cross-sensitivity between penicillins and cephalosporins:**
 - Cross-reactivity between penicillins and MOST 1st and 2nd generation cephalosporins is negligible. However, patients with a history of an anaphylactic reaction to amoxicillin or ampicillin should avoid cefradoxil, cefaclor, cefprozil, and cefprozil.
 - Cross-reactivity between penicillins and ALL 3rd and 4th generation cephalosporins e.g. cefixime, ceftriaxone, cefipime is negligible.
 - Overall cross reactivity between penicillins and cephalosporins: reported penicillin allergy 1 %; confirmed penicillin allergy 2.5% .
 - Anaphylactic reactions to cephalosporins are very rare - 0.0001 to 0.1 percent.

Alternatives to IV clindamycin:

- **Anaerobic coverage in antibiotic combinations** - substitute metronidazole 500 mg IV BID (adult); 30mg/kg/d divided q12 (pediatric)
Ex: Severe aspiration pneumonia - levofloxacin or moxifloxacin + metronidazole
- **Penicillin allergy** – cephalosporin as per guidelines for condition being treated
Ex: Severe complicated cutaneous infections – cefazolin 2 g IV q8h/cefazolin 75mg/kg/d IV div q8h divided q12h x 10d (pediatric)
- **Cephalosporin allergy** – vancomycin or linezolid
Ex: Severe pneumonia treated in-hospital: levofloxacin 750mg IV daily + vancomycin 25-30mg/kg IV once then 15mg/kg IV q8-12h x 5-10d (adult)
- **Pneumocystis pneumonia** if alternative to first line treatment TMP/SMX or trimethoprim is needed: pentamidine 4mg/kg/day IV x 21 days.
- **Endocarditis prophylaxis** for dental and upper respiratory procedures: Allergic to penicillin and NPO - cefazolin or ceftriaxone - 1g IM or IV (adult); 50mg/kg IM or IV (pediatric)

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October, 2013

References:

1. Health Canada. Drug Product Database.
2. The Ottawa Hospital Parenteral Drug Therapy Manual, 33rd edition, 2012.
3. Bugs and Drugs, 2nd edition, 2012.
4. Infectious Diseases - Therapeutic Choices. In e-therapeutics Complete online. Available by subscription.
5. Campagna JD, Bond MC et al. The use of cephalosporins in penicillin-allergic patients: a literature review. J Emerg Med. 2012 May;42(5):612-20. doi: 10.1016/j.jemermed.2011.05.035. Epub 2011 Jul 13.
6. Romano A. Cephalosporin allergy: Clinical manifestations and diagnosis. In UpToDate online. Available at www.uptodate.com by subscription.