

# Galway: GAPP - Galway Antimicrobial Prescribing Policy / Guidelines (GAPP): Pneumocystis jirovecii pneumonia (PJP)

## Pneumocystis jirovecii pneumonia (PJP)

1. **Discussion with Microbiology or Infectious Diseases** recommended.
2. Co-trimoxazole in high dosage is the treatment of choice for mild, moderate and severe PJP.
3. For **moderate to severe disease** (PaO<sub>2</sub> ≤9kPa on room air), **high dose steroids** should be co-administered with anti-pneumocystis therapy and should be discontinued before anti-pneumocystis therapy is complete: Prednisolone 40mg PO twice daily for 5 days, then 40mg once daily for 5 days, then 20mg once daily to complete a total of 14 to 21 days (depending on duration of PJP treatment).

PJP Treatment			
Infection	1 <sup>st</sup> Line	2 <sup>nd</sup> line	Comment
PJP	<p>Co-trimoxazole* IV/PO 120mg/kg/ day divided into a 6 to 8 hourly dosing regimen</p> <p>e.g. 30mg/kg every 6 hours*</p> <p>e.g. 70kg patient: 70x120 = 8,400mg daily, dosing regimen would be 2,100mg every 6 hours (round dose to nearest 480mg=1920mg)</p> <p>In severe disease consider oral switch at same dose when clinically improving.</p> <p>In mild to moderate disease consider oral route from outset.</p>	<p><b>Severe disease:</b></p> <p>Pentamidine IV 4mg/kg once daily</p> <p>Only to be used if intolerant or unresponsive to co- trimoxazole. Risk of significant adverse events including severe hypotension and hypoglycaemia with administration.</p> <p><b>Non-severe disease:</b></p> <p>Atovaquone</p> <p>OR</p> <p>Dapsone + Trimethoprim</p> <p>OR</p> <p>Clindamycin + Primaquine</p> <p>Contact Microbiology or Infectious Diseases or Pharmacy for advice and dosing.</p>	<p>Duration (ID or Micro consult recommended):</p> <p>Non-HIV infected: 14 -21 days</p> <p>HIV infected: 21 days</p>
*Please note the co-trimoxazole dose is a combined trimethoprim/sulfamethoxazole dose			
Caution with dose calculation as errors have occurred when dosing is based on the trimethoprim component (as recommended in US literature)			

### Refs:

1. *Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV. National Institutes of Health, Centers for Disease Control and Prevention, HIV Medicine Association, and Infectious Diseases Society of America. Available at <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-opportunistic-infection>. Accessed 23rd April 2024.*
2. *Pneumocystis jirovecii pneumonia. Catherinot et al. Infect Dis Clin North Am 2009;24:107-138*