

Letterkenny University Hospital - LUH Antimicrobial Prescribing Policy/Guidelines: Hospital Acquired Pneumonia

Hospital Acquired Pneumonia

1. Pneumonia should be treated as hospital acquired if onset from **5 days after hospital admission**. If recent hospital admission or multiple admissions over the previous 6 to 12 months **please discuss with consultant Microbiologist** .
2. The regimens below may NOT cover Multi-drug Resistant Organisms (MDRO) in all cases. **See note on MDRO** .
3. **Intensive care and immunosuppressed patients** should be discussed with **Microbiology**.

Empiric Antibiotics for Hospital Acquired Pneumonia

Infection	1 st Line Antibiotics	Penicillin allergy: delayed onset non-severe reaction	In penicillin allergy	Comment
The regimens below may NOT cover Multi-drug Resistant Organisms (MDRO) in all cases. See note on MDRO				
Hospital Acquired Pneumonia Contact Microbiology for treatment of Pseudomonal infection.	Moderate Piperacillin/tazobactam IV 4.5g every 6 hours	Moderate CefTRIAxone IV 2g every 24 hours Add Gentamicin IV IF haemodynamically unstable. Give one dose per LAPP App calculator. See footnote* re further doses and monitoring. Note if history of Pseudomonas colonisation/infection discuss alternative treatment with microbiologist.	Moderate Vancomycin IV infusion, dose per LAPP App calculator. See footnote* re monitoring. + Ciprofloxacin ** IV 400mg every 12 hours If possible aspiration Add Metronidazole IV 500mg every 8 hours Add Gentamicin IV IF haemodynamically unstable. Give one dose per LAPP App calculator. See footnote* re further doses and monitoring.	Duration 7 days May need to be extended according to clinical judgement in discussion with microbiology e.g. if Legionella pneumophila , Staphylococcus aureus or Gram-negative bacilli suspected or confirmed.
	Severe (ICU assessment required) Piperacillin/tazobactam IV 4.5g every 6 hours + Vancomycin IV infusion, dose per LAPP App calculator. See footnote* re review and monitoring. Review at 24 - 48 hours and stop if MRSA not detected from clinical samples or MRSA screen. Add Gentamicin IV IF haemodynamically unstable. Give one dose per LAPP App calculator. See footnote* re further doses and monitoring	Severe (ICU assessment required) Vancomycin IV infusion, dose per LAPP App calculator. See footnote* re monitoring. + Ciprofloxacin ** IV 400mg every 12 hours If possible aspiration add Metronidazole IV 500mg every 8 hours Add Gentamicin IV IF haemodynamically unstable. Give one dose per LAPP App calculator. See footnote* re further doses and monitoring.		
* Review need for ongoing Gentamicin and Vancomycin on a daily basis. Continue with once daily Gentamicin dosing ONLY if recommended by the patient's Consultant/Registrar . For advice on monitoring see Aminoglycoside & Vancomycin Dosing & Monitoring section.				
**Switch from IV to oral Ciprofloxacin (500mg PO every 12 hours) as soon as possible.				

References:■

1. American Thoracic Society/Infectious Diseases Society of America. Management of adults with hospital-acquired and ventilator-associated pneumonia *Clin Infect Dis* 2016;63:e61-111
2. BSAC Guidelines for the management of hospital-acquired pneumonia in the UK. [JAC 2008;62:5-34](#)