

Empirical Antibiotic Management of Common Infections in Adult Patients

Further advice/contacts: Consultant Microbiologist via switchboard, Antibiotic Pharmacist bleep 294

- ✓ These are **empirical** guidelines: modify if pathogen identified or if **previous resistant organisms (e.g. MRSA, ESBL producer)** identified. Check previous and current culture results **before** starting treatment. Check for high *Clostridium difficile* risk factors.
- ✓ Review Antibiotic therapy **DAILY**- Can you STOP? SWITCH to oral? DE-ESCALATE/simplify?
- ✓ Doses are for adult patients with normal renal and hepatic function- may need adjustment in patients with impaired clearance.
- ✓ **Always** document indication and duration in notes and drug chart.

CONTRA-INDICATED

USE WITH CAUTION

SAFE

Prescribing in penicillin allergy

Penicillin-containing Antibiotics must not be given to patients with a history of a true penicillin allergy.

Other Beta-Lactam Antibiotics can be used with a history of non-severe penicillin allergy (e.g. delayed/minor rash). **Avoid** if serious penicillin allergy (e.g. anaphylaxis/ angioedema).

Non Beta-Lactam Antibiotics are safe in patients with penicillin allergy. Remember to consider allergies to other antimicrobials.

INFECTION	1 st LINE ANTIBIOTICS	ALTERNATIVE IF ALLERGIC TO 1 st LINE	ORAL SWITCH	Total (IV+PO) DURATION
Sepsis of unknown site Request CXR, send blood** and urine cultures.	Amoxicillin 1g IV TDS + Gentamicin* IV OD	Teicoplanin 400mg IV 12 hourly for 3 doses then 400mg IV OD + Gentamicin* IV OD	Guided by culture results and eventual focus.	5 – 14 Days <i>depending on focus and clinical response</i>
Community Acquired Pneumonia (CAP) – see CAP pathway Record CURB-65 CXR. Score 1 point for each: • Confusion (new onset) • Urea >7mmol/L • Respiratory rate ≥30/min • Blood pressure <90mmHg (systolic) or ≤60mmHg (diastolic) • Age ≥ 65 years	Mild CAP (CURB65 = 0-1) Amoxicillin 500mg PO TDS	Clarithromycin 500mg PO BD	See left column	5 Days
	Moderate CAP (CURB65 =2) Amoxicillin 500mg PO TDS + Clarithromycin 500mg PO BD	Doxycycline 200mg PO STAT then 100mg OD	See left column	5 Days
	Severe CAP (CURB65 =3-5) Benzylpenicillin 1.2g IV QDS+ Clarithromycin 500mg IV/PO BD (IV only if unable to take PO)	Teicoplanin 400mg IV 12 hourly for 3 doses then 400mg OD+ Clarithromycin 500mg IV/PO BD	Amoxicillin 500mg PO TDS +/- Clarithromycin 500mg PO BD	5 Days <i>Review IV treatment within 48 hrs.</i>
	Clarithromycin – Mycoplasma infection is uncommon in patients aged >65 years. Stop clarithromycin as soon as clinically indicated.			
Hospital Acquired Pneumonia (HAP): ≥ 5 days after admission Send sputum. Blood cultures** if severe	Mild: Doxycycline 200mg PO STAT then 100mg OD	Seek advice	See left column	5 Days
	Severe: Benzylpenicillin 1.2g IV QDS+ Gentamicin* IV OD	Teicoplanin 400mg IV 12 hourly for 3 doses then 400mg IV OD + Gentamicin* IV OD	Doxycycline 200mg PO STAT then 100mg OD	5 Days <i>Review IV treatment within 48 hrs.</i>
Aspiration Pneumonia < 5 days after admission Send sputum Document CXR result at 48-72 hours post aspiration	Benzylpenicillin 1.2g IV QDS+ Gentamicin* IV OD + Metronidazole 400mg PO/500mg IV TDS	Teicoplanin 400mg IV 12 hourly for 3 doses then 400mg OD + Gentamicin* IV OD+ Metronidazole 400mg PO / 500mg IV TDS	Clarithromycin 500mg PO BD+ Metronidazole 400mg PO TDS	5 Days <i>Review IV treatment within 48 hrs.</i>
Infective Exacerbation of COPD Send sputum for culture	Doxycycline 200mg PO STAT then 100mg OD	Amoxicillin 500mg PO TDS or Clarithromycin 500mg PO BD	See left column	5 Days
Cellulitis Swab if broken/weeping skin. If necrotising fasciitis suspected, seek advice.	Non- severe: Flucloxacillin 1g PO QDS	Clarithromycin 500mg PO BD	See left column	5 – 14 Days <i>depending on clinical response</i>
	Severe: Flucloxacillin 2g IV QDS	Teicoplanin 400mg IV 12 hourly for 3 doses then 400mg IV OD	Flucloxacillin 1g PO QDS	
Clostridium difficile Stop any additional antibiotics, PPI therapy, laxatives.	Mild/moderate: Metronidazole 400mg PO TDS Severe: See section 6.2 of Antibiotic Guidelines on PIMS	Vancomycin 125mg PO QDS		10 Days. Observe infection control precautions
Uncomplicated UTI Send MSU before antibiotics >65 years – treat only if symptoms present	Trimethoprim 200mg PO BD	Nitrofurantoin 50mg PO QDS (do not use if GFR≤60mls/min)	Guided by MSU	Female: 3 Days Male: 7 days
	For patients who are catheterised exclude other causes of infection. Note: all CSU samples will be dipstick and culture positive – treat only if symptoms and signs of infection are present. Antibiotic choice is as above or as guided by recent CSU sample.			
Acute Pyelonephritis Send MSU. Blood cultures** if indicated.	Mild Trimethoprim 200mg PO BD	Consider Gentamicin with rapid oral switch	Guided by MSU result	10 Days
	Severe Amoxicillin 1g IV TDS + Gentamicin* IV OD	Gentamicin* IV OD	Guided by MSU result	10 Days
Cholecystitis/ Biliary sepsis	Amoxicillin 1g IV TDS + Metronidazole 500mg IV TDS + Gentamicin* IV OD	Metronidazole 500mg IV TDS + Gentamicin* IV OD	<65 years: Co-amoxiclav 625mg PO TDS > 65 years Amoxicillin 500mg PO TDS + Metronidazole 400mg PO TDS	5 Days <i>Review IV treatment within 48 hrs.</i>
	If jaundice with suspected ascending cholangitis: Piperacillin-Tazobactam (Tazocin) 4.5g IV TDS			

***For Gentamicin dosing and monitoring:**
Refer to ONCE DAILY Gentamicin on PIMS & use online dose calculator on intranet applications
** refer to blood culture policy