

# Adult IV → Oral Antibiotic Switch Therapy (IVOST) Guideline

→ Can I switch my patient from IV to PO antibiotics?

Review need for IV antibiotics DAILY: review & document patient progress/the IVOST plan within 72 hours of IV antibiotic initiation

## Are all of the following IVOST criteria met?

- ✓ **CLINICAL IMPROVEMENT** in signs of infection e.g. temperature  $\leq 37.9^{\circ}\text{C}$ , reduction in the NEWS score, improving SEPSIS
- ✓ **ORAL ROUTE is available reliably** (eating/drinking and no concerns regarding absorption)
- ✓ **UNCOMPLICATED INFECTION** (i.e. specialist advice not required prior to IVOST). Certain infections need specialist advice e.g. CNS infection, Cystic Fibrosis, *S. aureus* bacteraemia (minimum 14 days IV), Endocarditis, Vascular graft or Bone/joint infection, Undrainable deep abscess

**CRP does NOT reflect severity of illness or the need for IV antibiotics & may remain elevated as the infection improves**

**DO NOT** use CRP in isolation to assess IVOST suitability. Most infections require  $\leq 7$  days TOTAL (IV + oral) therapy. Record the intended duration on the Kardex.

YES

NO

Can you **STOP THERAPY**? If antibiotic therapy is still required → **SWITCH TO ORAL**.  
FIRST check the **MICROBIOLOGY** results; can you **NARROW THE SPECTRUM** based on cultures?

If the patient is being treated in line with the Empiric Infection Management Guidelines  
**AND** there is **NO +ve MICROBIOLOGY** to guide the change then switch to oral as outlined below;

Check the microbiology results. Can you **NARROW THE SPECTRUM** of IV therapy?

### Is the patient on IV gentamicin?

**DO NOT** continue IV gentamicin for longer than 4 days (except on the advice of Microbiology/ID). Patients prescribed IV gentamicin for 4 days should have a senior review of their diagnosis, microbiology and clinical progress;

1. Is Gram-negative cover still required? If not, stop gentamicin.
2. Is there any positive microbiology? If so simplify.
3. If IV therapy & Gram-negative cover are still required and there is no positive microbiology, discuss with Microbiology/ID.
4. If gentamicin is still required (e.g. endocarditis) seek advice from Microbiology/ID & monitor for renal & oto/vestibular toxicity.

### Would the patient be suitable for outpatient IV antibiotic therapy (OPAT)? (e.g. bone/joint infection, *S aureus* bacteraemia, endocarditis, resistant Gram-negative infection)

If Yes / don't know: contact the OPAT Service at QEUH on 0141 452 3107 (internal: 83107) **AND** refer to OPAT via TrakCare

\*Consult microbiology or infectious diseases on the switch options for the infections listed above which require specialist advice OR where empiric IV antibiotic therapy differed from guideline on specialist advice.

†Consult the product literature/pharmacy for doses in renal/hepatic dysfunction. Serious drug interactions/QT prolongation with clarithromycin & quinolones. Reduced absorption of doxycycline & quinolones with calcium, iron & magnesium. See the BNF or consult pharmacy.

DIAGNOSIS*	EMPIRIC ORAL SWITCH <sup>†</sup>		TOTAL duration (IV + PO)
	1 <sup>ST</sup> LINE	2 <sup>ND</sup> LINE/PENICILLIN ALLERGY	
Neutropenic sepsis	Co-amoxiclav 625mg 8 hrly & Discuss with micro/ID	Levofloxacin 500mg 12 hrly & Discuss with micro/ID	7 days
Resolving sepsis and source unknown	Co-amoxiclav 625mg 8 hrly	Co-trimoxazole 960mg 12 hrly	5-7 days
Community-acquired pneumonia OR Infective exacerbation of COPD	Amoxicillin 500mg 8 hrly	Doxycycline 200mg as a one-off single dose then 100mg daily	5 days
Hospital-acquired pneumonia	Co-trimoxazole 960mg 12 hrly	Doxycycline 100mg 12 hrly	5 days
Aspiration pneumonia	Amoxicillin 500mg 8 hrly	Clarithromycin 500mg 12 hrly <b>PLUS</b> Metronidazole 400mg 8 hrly	5 days
Cellulitis	Flucloxacillin 1000mg 6 hrly	Co-trimoxazole 960mg 12 hrly <b>OR</b> Doxycycline 100mg 12 hrly	7-10 days
Infected human/ Animal bite	Co-amoxiclav 625mg 8 hrly	Doxycycline 100mg 12 hrly <b>PLUS</b> Metronidazole 400mg 8 hrly	7 days
Intra-abdominal/ Biliary tract infection	Co-amoxiclav 625mg 8 hrly	Co-trimoxazole 960mg 12hrly (or Ciprofloxacin 500mg 12 hrly) <b>PLUS</b> Metronidazole* 400mg 8 hrly	5 days (assuming source control) *Metronidazole is NOT required for biliary tract infection, unless severe
Spontaneous bacterial peritonitis	If NO prior co-trimoxazole prophylaxis: Co-trimoxazole 960mg 12 hrly Or if prior co-trimoxazole prophylaxis: Co-amoxiclav 625mg 8 hrly	Ciprofloxacin 500mg 12 hrly	7 days
Urinary Sepsis/ Pyelonephritis	Co-trimoxazole 960mg 12 hrly	Ciprofloxacin 500mg 12 hrly	7 days