NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

IV to Oral Antibiotic Switch Guideline (IVOST) Adult

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

Version Number:	10
Does this version include changes to clinical advice:	Yes
Date Approved:	25th August 2020
Date of Next Review:	31st August 2023
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Approval Group:	Antimicrobial Utilisation Committee

Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

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 ≤ 37.9°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 ≤ 7 days TOTAL (IV + oral) therapy. Record the intended duration on the Kardex.

YES

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;

DIAGNOSIS❖	EMPIRIC ORAL SWITCH■ 1ST LINE	EMPIRIC ORAL SWITCH■ 2nd LINE/PENICILLIN ALLERGY	TOTAL duration (IV + PO)
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 **PLUS** **Metronidazole** 400mg 8 hrly	5 days
Cellulitis	**Flucloxacillin** 1000mg 6 hrly	**Co-trimoxazole** 960mg 12 hrly **OR** **Doxycycline** 100mg 12 hrly	7-10 days
Infected human/ Animal bite	**Co-amoxiclav** 625mg 8 hrly	**Doxycycline** 100mg 12 hrly **PLUS** **Metronidazole** 400mg 8 hourly	7 days
Intra-abdominal/ Biliary tract infection	**Co-amoxiclav** 625mg 8 hrly	**Co-trimoxazole** 960mg 12hrly (or Ciprofloxacin 500mg 12 hrly) **PLUS** **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-trimoxaxole 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

NO

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.

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NHS Greater Glasgow & Clyde Antimicrobial Utilisation Committee, August 2020. Review August 2023