

# Louth: Antimicrobial Guidelines - Louth Hospitals: Antimicrobial Guidelines: IV to Oral Switch Therapy

## Introduction

For serious infections, the IV route is often preferred initially for the administration of antibiotics. Some antibiotics have excellent oral bioavailability and may be prescribed orally in the first instance if there are no contra-indications to oral therapy. **Always review IV antibiotic therapy after 48 hours and then daily to check if patient meets criteria for IV to oral switch** . Switch to oral antibiotics has advantages for the patient, staff and hospital.

## Antibiotics with excellent oral bioavailability

Examples of antibiotics with excellent oral bioavailability :

Antibiotic	Oral Bioavailability
Ciprofloxacin	70 – 80%
	(higher dose when given PO)
Clindamycin	90%
Co-trimoxazole	90 – 100%
Fluconazole	Over 90%
Levofloxacin	99 - 100%
Linezolid	100%
Metronidazole	100%
Rifampicin	70 – 90%
Sodium Fusidate	91%

## IV to Oral Switch Criteria (COMS)

- **C** linical improvement and afebrile for 24 to 48 hours
- **O** ral route feasible
- **M** arkers of infection improving
- **S** pecific infection requiring prolonged IV Rx excluded - see examples below.

Examples of infections that require prolonged IV therapy:

Deep-seated infections	High risk infections
Empyema	Meningitis
Osteomyelitis / Septic arthritis	Endocarditis
Deep-seated abscess	S. aureus bacteraemia

## Appropriate IV to Oral Switch Options

Examples of Appropriate IV to Oral Switch Options:

IV Antimicrobial	Oral Alternative
Amoxicillin 1g TDS IV	Amoxicillin 500mg to 1g TDS PO
Benzylpenicillin 2.4g QDS IV	Amoxicillin 1g TDS PO
Cefuroxime 1.5g TDS IV	<b>N.B. Oral cef-UR-oxime is NOT recommended due to low oral bioavailability.</b>
	Empiric oral switch: Cefaclor LA 750mg BD PO
	Directed therapy based on C&S:
	<ul style="list-style-type: none"> <li>• For urinary tract infections, if the isolate is susceptible to cef-AL-exin, suggest either oral cef-AL-exin (500mg TDS PO for lower UTI, 1g TDS to QDS PO for pyelonephritis) or oral cefaclor</li> <li>• For other infections, if the isolate is susceptible to cef-UR-oxime, suggest oral cefaclor.</li> </ul>
Clarithromycin 500mg BD IV	Clarithromycin 500mg BD PO
Clindamycin 600mg QDS IV	Clindamycin 300-450mg QDS PO
Co-amoxiclav 1.2g TDS IV	Co-amoxiclav 625mg TDS PO
Ciprofloxacin 400mg BD IV	Ciprofloxacin 500mg BD PO
Flucloxacillin 2g QDS IV	Flucloxacillin 1g QDS PO
Fluconazole 400mg daily IV	Fluconazole 400mg daily PO
Levofloxacin 500mg BD IV	Levofloxacin 500mg BD PO
Linezolid 600mg BD IV	Linezolid 600mg BD PO
Metronidazole 500mg TDS IV	Metronidazole 400mg TDS PO
Pip/tazobactam 4.5g TDS IV	No empiric oral switch option. Oral switch may be possible based on C&S, contact clinical microbiology team for advice if needed.

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## References

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