

## IV Gentamicin: What to do after 72 hours (Adults)

All antibiotic prescriptions must be reviewed daily, including whether IVOST is appropriate (refer to the IV to Oral Antibiotic Switch Therapy [IVOST] Guideline [Adults]). Consider stopping gentamicin earlier, if no longer indicated.

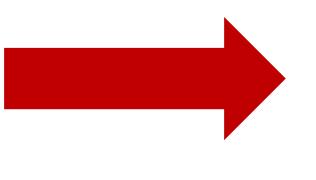
All IV gentamicin prescriptions MUST BE reviewed 72 hours after start of treatment (i.e. 3 doses with 24 hourly dosing).

It may be appropriate for IV gentamicin to continue, although higher cumulative doses increase the risk of toxicity. Do not exceed 7 days, unless directed by microbiology.

Before prescribing: review previous microbiology results, consider allergies, contraindications and potential drug interactions, and take into account renal/liver function.

**EXCLUSION: DO NOT** use this chart for synergistic IV gentamicin given for suspected or proven infective endocarditis, pregnancy/breastfeeding, or <18 years.

#### Patient has features of sepsis/ septic shock



Urgent review by a senior clinician, consider escalating antimicrobial therapy

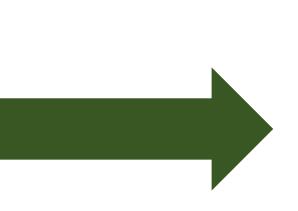
#### Patient is stable or improving

Review culture results



**IVOST** criteria not met

No positive culture/ cultures in progress/ cultures not taken



#### **IVOST** criteria met

Positive cultures: switch to reported appropriate oral options

No positive cultures: follow empirical oral switch in **IVOST guidance** in handbook

#### If positive cultures available

Switch to reported appropriate IV agent or highly bioavailable oral agent (e.g. co-trimoxazole<sup>1</sup>, ciprofloxacin<sup>1,2,3</sup>)



# Upper UTI/ Pyelonephritis with sepsis (now resolved)

Patients improving after 72 hours of IV antibiotics would usually be suitable for IVOST. Refer to IVOST guidance for appropriate agent

## If PO antibiotics are contra-indicated (e.g. nil by mouth):

IV Co-trimoxazole<sup>1</sup>

If Co-trimoxazole resistance on recent urine culture or inappropriate, discuss choice with Microbiology Consultant

\*Nitrofurantoin is contra-indicated in upper UTI / pyelonephritis

## Hospital-acquired pneumonia

Stop IV Gentamicin
Continue PO Co-trimoxazole<sup>1</sup>

## Bone & Joint Infections (BJI) OR Severe Skin & Soft Tissue Infections (SSTI)

Continuing Gram negative cover with IV Gentamicin is not always required

### **Culture in progress:**

Continue IV Gentamicin (unless renal failure, toxicity, difficulty monitoring)
Review daily, **do not** exceed 7 days

# Intra-abdominal infection or sepsis or unknown source

No Co-trimoxazole use in the last 6 months AND no ESBL in the last 12 months:

Switch to PO Co-trimoxazole<sup>1</sup> +/- PO Metronidazole<sup>1,4</sup>

## Co-trimoxazole use in the last 6 months AND no ESBL in the last 12 months:

Switch to IV/PO Co-amoxiclav<sup>5</sup>

If unsuitable:

PO Ciprofloxacin<sup>1,2,3</sup> +/- PO Metronidazole<sup>1,4</sup>

#### **ESBL** in the last 12 months:

Speak to Microbiology Consultant for advice

### If previous ESBL reported susceptible (S), can consider:

Switch to PO Co-trimoxazole<sup>1</sup> +/- PO Metronidazole<sup>1,4</sup> *If unsuitable:* 

PO Ciprofloxacin<sup>1,2,3</sup> +/- PO Metronidazole<sup>1,4</sup>

\*Co-amoxiclav and Piperacillin/Tazobactam provide sufficient anaerobic cover. Additional metronidazole is not required

- **1.** High bioavailability, use IV only if PO contraindicated
- **2.** If previous *C.difficile* infection, consider alternative listed options and/or discuss with Microbiology Consultant
- 3. Consider MHRA warnings. Patient will need counselling and given a patient information leaflet
- **4.** Metronidazole is not routinely required for biliary tract infections, unless severe
- 5. Avoid in penicillin allergy

If further advice is required after discussion with an appropriate senior member of the clinical team, a non-urgent referral to the duty Microbiology Consultant can be made by email at dg.microbiologycons@nhs.scot

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## Most infections require ≤7 days total (IV+PO) of antibiotics.

For recommended durations, refer to <u>Adult Secondary Care Antibiotic guidance</u> and <u>IVOST guidance</u>

For dosing advice, refer to <u>BNF</u> or <u>eMC</u> or <u>Renal Drug Handbook</u> for dosing adjustment