



## CLINICAL GUIDELINE

# Antibiotic Prophylaxis Interventional Radiology Procedures, Adults

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.

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<b>Approval Group:</b>	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.



## NHS Greater Glasgow and Clyde recommendations for antibiotic prophylaxis in Interventional Radiology procedures

**Single dose, IV prophylaxis** ≤ 60mins prior to skin incision/ intervention. For advice on repeat dosing of antibiotics for operations lasting longer than 4 hours or > 1500 ml blood loss see [Principles of Surgical Prophylaxis \(1039\) | Right Decisions \(scot.nhs.uk\)](#)

### Gentamicin

- See Appendix 1 for gentamicin prophylactic dosing table
- If subsequent treatment using gentamicin is required, measure gentamicin concentration 6-14 hours post theatre gentamicin dose, and follow GGC guidance on staffnet for gentamicin dosing. Calculate the subsequent gentamicin dose using the online calculator. Discuss with pharmacy if further advice is required (or if out of hours, the on call pharmacist)
- Teicoplanin and gentamicin are incompatible when mixed directly and must not be mixed before injection.

### Teicoplanin

- Give 400 mg **teicoplanin** by slow intravenous injection over 3-5 minutes.
- Teicoplanin and gentamicin are incompatible when mixed directly and must not be mixed before injection.

**MRSA:** decolonise prior to procedure as per NHS GGC infection control guidelines and discuss with microbiology re antibiotic choice.

**CPE carriers:** If identified as Carbapenamase producing Enterobacteriales carriers contact microbiology.

### Obesity BMI > 30 Kg/m<sup>2</sup>

Consider increasing the dose of antibiotic as below:

	<b>Weight &gt; 100 Kg</b>
Co-amoxiclav	Add 1 g IV amoxicillin to 1.2 g Co-amoxiclav



	<p>△If decompensated liver disease, do <b>not</b> use gentamicin, give oral co-trimoxazole 960mg 60 min prior to skin incision/ intervention</p>
<p><b>Urological Interventions</b>  Review previous microbiology and if no resistance to recommended antibiotics give as recommended. If previous resistance to these antibiotics contact microbiology.  Percutaneous nephrolithotomy (PCNL)  New Percutaneous nephrostomy insertion  New Ureteric stent insertion  Radiofrequency Ablation (Renal)</p> <p>Routine Nephrostomy or Ureteric stent exchanges</p>	<p>Gentamicin IV  (see surgical prophylaxis dosing table below)  Or  Ciprofloxacin 750mg oral 60 minutes prior to procedure</p> <p>Antibiotics required only if symptoms suggestive of UTI  If inpatient on IV antibiotics discuss with microbiology</p>
<p><b>Abscess Drainage</b></p>	<p><b>Discuss/ agree with referring clinician. May require targeted antibiotic therapy following aspiration</b></p>
<p><b>Musculoskeletal Interventions</b>  Vertebroplasty / Cementoplasty</p>	<p>Flucloxacillin 2g IV  <i>or in penicillin allergy</i>  Teicoplanin 400mg IV</p>

**Appendix 1**  
**Prophylactic IV Gentamicin Dosing Table**  
(See [Principles of Surgical Prophylaxis \(1039\) | Right Decisions \(scot.nhs.uk\)](#) )

- Avoid gentamicin if CrCl < 20 ml/min: seek advice on alternative from microbiology.
- In renal transplant patients avoid gentamicin and seek advice from microbiology or renal team.
- Use GGC CrCl calculator to assess renal function. Do not use eGFR in patients at extremes of body weight.
- Use the patient's actual body weight and height to calculate the gentamicin dose, using table below. This prophylactic gentamicin dosing table is based on approximately 5 mg/kg actual body weight/ adjusted body weight.
- Doses of up to 600 mg gentamicin can be given undiluted by slow IV injection over 3 – 5 minutes, or diluted to 20 ml with 0.9 % saline and given slowly over 3-5 minutes, administer via large peripheral vein or central line.
- Monitor for signs of extravasation or infiltration e.g. swelling, redness, coolness or blanching at the cannula insertion site.

HEIGHT \ WEIGHT	30 – 39.9 kg	40 – 49.9 kg	50 – 59.9 kg	60 – 69.9 kg	70 – 79.9 kg	80 – 89.9 kg	90 – 99.9 kg	100 – 109.9 kg	110 – 119.9 kg	120 – 129.9 kg	130 – 139.9 kg	140 – 149.9 kg	150 – 159.9 kg	160 – 169.9 kg	170 – 179.9 kg	180 – 189.9 kg	≥190 kg
142 - 146 cm 4'8" - 4'9"	180 mg	200 mg	220 mg	240 mg	260 mg	280 mg	300 mg	320 mg	340 mg	360 mg							
147 - 154 cm 4'10" - 5'0"	180 mg	200 mg	240 mg	260 mg	280 mg	300 mg	320 mg	340 mg	360 mg	380 mg	400 mg						
155 - 164 cm 5'1" - 5'4"	180 mg	200 mg	260 mg	280 mg	300 mg	320 mg	340 mg	360 mg	380 mg	400 mg	420 mg	440 mg	480 mg				
165 - 174 cm 5'5" - 5'8"		200 mg	280 mg	300 mg	320 mg	340 mg	360 mg	380 mg	400 mg	420 mg	460 mg	480 mg	480 mg	520 mg	540 mg		
175 - 184 cm 5'9" - 6'0"		200 mg	280 mg	320 mg	360 mg	380 mg	400 mg	420 mg	440 mg	460 mg	480 mg	500 mg	520 mg	540 mg	560 mg	580 mg	600 mg
185 - 194 cm 6'1" - 6'4"			280 mg	320 mg	360 mg	400 mg	420 mg	440 mg	460 mg	480 mg	500 mg	540 mg	560 mg	580 mg	600 mg	600 mg	600 mg
≥195 cm ≥6'5"				320 mg	360 mg	420 mg	460 mg	480 mg	500 mg	520 mg	540 mg	560 mg	580 mg	600 mg	600 mg	600 mg	600 mg