Vascular Surgery
Surgical Antibiotic Prophylaxis Guidelines

PRE-OPERATIVE CONSIDERATIONS

**Drug administration**
- Slow IV bolus – should be given ≤ 60 minutes before skin incision (ideally at 30 minutes). Administration after skin incision or > 60 minutes before incision reduces effectiveness
- IV infusion – should be timed to end ≤ 30 minutes before skin incision

**Pre-existing infections (known or suspected)** – if present, use appropriate treatment regimen instead of prophylactic regimen for procedure. Doses should be scheduled to allow for re-dosing just prior to skin incision.

**PROPHYLAXIS REGIMEN**

<table>
<thead>
<tr>
<th>Procedures</th>
<th>First line regimen</th>
<th>Alternative (Immediate type or severe penicillin or cephalosporin hypersensitivity)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vascular reconstruction (e.g. abdominal aorta, graft/stent insertion, groin incision)</strong></td>
<td><strong>Cephazolin 2g IV bolus over 5 minutes before incision, then 8-hourly for 24 hours post-operatively</strong></td>
<td><strong>Vancomycin 1g IV infused over 100 minutes before incision, (1.5g IV for patients &gt; 80 kg infused over 150 minutes) then 12 hours post-operatively</strong></td>
</tr>
<tr>
<td><strong>Amputation of ischaemic limb</strong></td>
<td><strong>Cephazolin 2g IV bolus over 5 minutes before incision, then 8-hourly for 24 hours post-operatively plus Metronidazole 500mg IV before incision, then 12 hours post-operatively</strong></td>
<td><strong>Vancomycin 1g IV infused over 100 minutes before incision, (1.5g IV for patients &gt; 80 kg infused over 150 minutes) then 12 hours post-operatively plus Metronidazole 500mg IV infused over 20 minutes before incision, then 12 hours post-operatively</strong></td>
</tr>
<tr>
<td><strong>AV fistula formation (with prosthetic material)</strong></td>
<td><strong>Cephazolin 2g IV (single dose only) bolus over 5 minutes before incision</strong></td>
<td><strong>Vancomycin 1g IV (single dose only) infused over 100 minutes before incision, (1.5g IV for patients &gt; 80 kg infused over 150 minutes)</strong></td>
</tr>
</tbody>
</table>

**All other clean procedures** (e.g. thoracoscopic sympathectomy, stripping/ligation of varicose veins,)

- Nil recommended

**MRSA COLONISATION**

**Patients with a history of MRSA colonisation or infection**

**ADD**

- **Vancomycin 1g IV infused over 100 minutes before incision, (1.5g IV for patients > 80 kg infused over 150 minutes)**

**DURATION OF PROPHYLAXIS**

Prophylaxis should be no greater than 24 hours, with a single dose sufficing in most cases. A second dose should be given if the procedure is longer than two half lives of the agent used. (e.g. 4 hours for cephazolin) Continuing antibiotic administration is not appropriate unless infection is confirmed or suspected – modify antibiotic regimen appropriately according to treatment guidelines.

---

Dr John Quinn
Director
Vascular Surgery

Prof Stephen Lynch
Chair
Division of Surgery

Dr David Looke
Chair
Antimicrobial Sub-Committee

Prof Peter Pillans
Chair
Drug and Therapeutics Committee

---

Metro South Health
Version 1
Approved: September 2013
Review date: September 2015