

General Guidelines for Antimicrobial Selection in Surgical Prophylaxis IF Antibiotics Indicated

***MRSA Risks: unless otherwise noted, use vancomycin 1Gm IV x 1 as an alternative agent for Gram (+) coverage**

- Acute inpatient hospitalization within the past year
- Residence in long-term care setting within the past year
- Receipt of chronic wound care or dialysis
- History of MRSA infection / colonization

±Significant IgE mediated β-lactam allergies include hypersensitivity reactions such as hives and laryngospasms to PCN & cephalosporins

Intra-operative antimicrobial dosing

Antimicrobial Agent	Timing of Redose	Post-op dose
Cefazolin	Q4 Hrs	Q8 Hrs
Cefotetan	Q12 Hrs	Q12 Hrs
Ciprofloxacin	Q12 Hrs	Q12 Hrs
Clindamycin	Q8 Hrs	Q8 Hrs
Gentamicin	Q8 Hrs	Q8 Hrs
Metronidazole	Q8 Hrs	Q8 Hrs
Vancomycin	Q12 Hrs	Q12 Hrs
TMP-SMX	Q12 Hrs	Q12 Hrs

Surgical Intervention	Regimen of Choice	Alternative	Post-Op Frequency
Cardiothoracic	Vancomycin 1 Gm IV x 1 or < 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1	Discontinue within 48 Hrs of wound closure
Gastrointestinal:	< 80 kg Cefotetan 1 Gm IV x 1 ≥ 80 kg Cefotetan 2 Gm IV x 1	IgE β-lactam Allergy±: Clindamycin 600 mg IV x 1 + gentamicin 80 mg (100 mg if ≥ 80kg) IV x 1 MRSA Risk*: Vancomycin 1 Gm IV x 1 + Cefotetan 1 Gm IV x 1 (2 Gm if ≥ 80 kg)	Discontinue within 24 Hrs of wound closure
PEG placement / revision	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Clindamycin 600 mg IV x 1 + gentamicin 80 mg (100 mg if ≥ 80kg) IV x 1	
General: any implanted foreign body (e.g. hernia patch)	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1	Discontinue within 24 Hrs of wound closure
OB/GYN Hysterectomy / Cesarean	Cefazolin 2 Gm IV x 1 Or Cefotetan 2 Gm IV x 1	IgE β-lactam Allergy±: Clindamycin 600 mg IV x 1 + gentamicin 100 mg IV x 1 MRSA Risk*: Vancomycin 1 Gm IV x 1 + Cefotetan 2 Gm IV x 1	Discontinue within 24 Hrs of wound closure

General Guidelines for Antimicrobial Selection in Surgical Prophylaxis IF Antibiotics Indicated (continued)

Surgical Intervention	Regimen of Choice	Alternative	Post-Op Frequency
Head & Neck	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Clindamycin 600 mg IV x 1	Discontinue within 24 Hrs of wound closure
Neurosurgery	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1	Discontinue within 24 Hrs of wound closure
Orthopedic	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1	Discontinue within 24 Hrs of wound closure
Plastic Surgery	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1 or Vancomycin 1 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1	Discontinue within 24 Hrs of wound closure
Thoracic: non-cardiac	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1	Discontinue within 24 Hrs of wound closure
Vascular	< 80 kg Cefazolin 1 Gm IV x 1 ≥ 80 kg Cefazolin 2 Gm IV x 1	IgE β-lactam Allergy±: Vancomycin 1 Gm IV x 1 MRSA Risk*: Vancomycin 1 Gm IV x 1	Discontinue within 24 Hrs of wound closure

Guidelines for Antimicrobial Selection in Surgical Prophylaxis Urology Section

Surgical Intervention	Regimen of Choice	Alternative	Post-Op Frequency
Upper Tract Instrumentation			
Shock-wave lithotripsy	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1, or TMP-SMX DS (Bactrim DS) 1 Po x 1	Discontinue within 24 Hrs of wound closure
Percutaneous renal surgery	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1	Discontinue within 24 Hrs of wound closure
Uteroscopy	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1, or TMP-SMX DS (Bactrim DS) 1 Po x 1	Discontinue within 24 Hrs of wound closure
Open or Laparoscopic Surgery			
Vaginal surgery (includes urethral sling)	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1	Discontinue within 24 Hrs of wound closure
Without entering urinary tract	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Clindamycin 600 mg IV x 1	Discontinue within 24 Hrs of wound closure
Involving entry into urinary tract	Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1	IgE β-lactam Allergy\pm: Gentamicin 5mg/kg IV x 1 + Metronidazole 1Gm IV/Po x 1	Discontinue within 24 Hrs of wound closure
Involving intestine	Cefotetan 1 Gm IV x 1	IgE β-lactam Allergy\pm: Clindamycin 600 mg IV x1 + Gentamicin 5mg/kg IV x 1	Discontinue within 24 Hrs of wound closure
Involving implanted prosthesis	Cefotetan 1 Gm IV x 1 + Gentamicin 5 mg/kg IV x 1	IgE β-lactam Allergy\pm: Vancomycin 1 Gm IV x 1 + Gentamicin 5mg/kg IV x 1	Discontinue within 24 Hrs of wound closure

Surgical Intervention	Regimen of Choice	Alternative	Post-Op
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			Frequency
Lower Tract Instrumentation			
Removal of external urinary catheter Cystography Urodynamic Study Simple Cystourethroscopy Cystourethroscopy with manipulation	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1, or TMP-SMX DS (Bactrim DS) 1 Po x 1	Discontinue within 24 Hrs of wound closure
Prostate brachytherapy or cryotherapy	Cefazolin 1 Gm IV x 1 or Cephalexin 500 mg Po x 1	IgE β-lactam Allergy\pm: Clindamycin 600 mg IV x 1	Discontinue within 24 Hrs of wound closure
Transrectal prostate biopsy	Ciprofloxacin 500 mg Po x 1, or Ciprofloxacin 400 mg IV x 1, or Levofloxacin 500 mg IV/Po x 1	IgE β-lactam Allergy\pm: Gentamicin 5mg/kg IV x 1 + Metronidazole 1Gm IV/Po x 1	Discontinue within 24 Hrs of wound closure

Selected References:

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This general antimicrobial guideline based upon Infectious Disease Society of America (IDSA) guidelines and St. Joseph Hospital, Orange, CA internal antibiogram.