

Galway: GAPP - Galway Antimicrobial Prescribing Policy / Guidelines (GAPP): Cardiothoracic Surgery

Antibiotics for Cardiothoracic Surgery					
Type of Surgery	Procedure	1 st Line Antibiotic	In penicillin allergy See penicillin hypersensitivity section for further information	Number & Timing of Doses	
Prophylaxis in Cardiothoracic Surgery See Note Regarding Risk Factors for MRSA See Note Regarding Multi-drug Resistant Organisms (MDRO)	Coronary artery bypass graft (CABG)	CefUROXime** IV 1.5g every 8 hours for a total of 3 doses (24 hour cover) + If risk factors for or colonised with MRSA Add Teicoplanin IV 10mg/kg * (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover)	immediate or severe delayed reaction only: Teicoplanin IV 10mg/kg* (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover) + Gentamicin IV ONE dose only, dose per GAPP App calculator (24 hour cover)	1 st dose within 60 minutes before incision & continued for 24 hours.	
	** Additional intra-operative dose of cefUROXime IV 1.5g required if duration of procedure > 4 hours or >1.5L intra-operative blood loss - See Antibiotics requiring additional intra-operative doses				
	Prosthetic valve surgery As for CABG				
	Transcatheter aortic valve implantation (TAVI)	Co-amoxiclav IV 1.2g every 8 hours for a total of 3 doses (24 hour cover).	Co-amoxiclav IV 1.2g every 8 hours for a total of 3 doses (24 hour cover). + Gentamicin IV ONE dose only, dose per GAPP App calculator (24 hour cover)	Teicoplanin IV 10mg/kg* (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover) + Gentamicin IV ONE dose only, dose per GAPP App calculator (24 hour cover)	1 st dose within 60 minutes before incision & continued for 24 hours
	Cardiovascular Implantable Electronic Device placement (including permanent pacemakers and Implantable cardioverter-defibrillator (ICD))	Flucloxacillin IV 1g one dose; continue 1g PO every 6 hours for another 3 doses (24 hour cover) If risk factors for or colonised with MRSA Replace Flucloxacillin with Teicoplanin IV 10mg/kg * (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover)	Flucloxacillin IV 1g one dose; continue 1g PO every 6 hours for another 3 doses (24 hour cover) If risk factors for or colonised with MRSA Replace Flucloxacillin with Teicoplanin IV 10mg/kg * (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover)	Any history of penicillin allergy: Teicoplanin IV 10mg/kg* (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover)	1 st dose within 60 minutes before incision & continued for 24 hours.
Thoracotomy, Pulmonary resection	CefUROXime** IV 1.5g every 8 hours for a total of 3 doses (24 hour cover)	CefUROXime** IV 1.5g every 8 hours for a total of 3 doses (24 hour cover) + Gentamicin IV ONE dose only, dose per GAPP App calculator (24 hour cover)	immediate or severe delayed reaction only: Teicoplanin IV 10mg/kg *(Max 800mg) every 12 hours for a total of 2 doses (24 hour cover) + Gentamicin IV ONE dose only, dose per GAPP App calculator (24 hour cover)	1 st dose within 60 minutes before incision & continued for 24 hours.	
Video-assisted thoracoscopy (VATS)	CefUROXime** IV 1.5g (one dose only)	CefUROXime** IV 1.5g (one dose only)	immediate or severe delayed reaction only: Teicoplanin IV 10mg/kg * (Max 800mg) (one dose only) + Gentamicin IV ONE dose only, dose per GAPP App calculator	One dose within 60 minutes before incision.	
* Discuss dosing in obese patients with Microbiology, Infectious Diseases or Pharmacy					