

Antimicrobial	Adult intraoperative dose	Infusion time	Half-life in NORMAL renal function (CrCl >50 mL/min) in hours	Intraoperative redosing interval (hours) in adults:					Y-site incompatibilities
				With NORMAL renal function (CrCl >50 mL/min)	With CrCl 10-50 mL/min	With CrCl < 10 mL/min	Receiving intraoperative HD session for ≥ 2.5-3 hours	Receiving CRRT (dialysate rate > 1 L/hr)	
Ampicillin	2 g	30 min	1-1.9	2	6	NA	Redose post-HD	6	aztreonam, cefazolin, ceftazidime, ceftriaxone, cefoxitin, cefuroxime, clindamycin, ertapenem, fluconazole, gentamicin, vancomycin
Ampicillin-sulbactam	3 g	30 min	0.8-1.3	2	8	NA	Redose post-HD	8	aztreonam, cefazolin, ceftazidime, ceftriaxone, cefoxitin, cefuroxime, clindamycin, ertapenem, fluconazole, gentamicin, vancomycin
Azithromycin	500 mg	60 min	72	NA	NA	NA	NA	NA	aztreonam, ceftazidime, ceftriaxone, cefuroxime, clindamycin, gentamicin, levofloxacin, pip/tazo
Aztreonam	2 g	30 min or IV push (3-5 min)	1.3-2.4	4	12	NA	Redose post-HD	12	ampicillin, amp/sulb, metronidazole, vancomycin

Cefazolin	2 g for < 120 kg	30 min or IV push (3-5 min)	1.2-2.2	4	12	NA	Redose post-HD	12	ampicillin, amp/sulb, ertapenem, levofloxacin, vancomycin
	3 g for >120 kg								
Cefepime	2 g	30 min or IV push (3-5 min)	2	4	12	NA	Redose post-HD	12	ampicillin, vancomycin
Cefoxitin	2 g	30 min or IV push (3-5 min)	0.7-1.1	2	4	NA	Redose post-HD	4	ampicillin, amp/sulb, levofloxacin, pip/tazo, vancomycin
Cefuroxime	1.5 g	30 min or IV push (3-5 min)	1-2	4	12	NA	Redose post-HD	12	ampicillin, amp/sulb, azithromycin, fluconazole, vancomycin
Ceftazidime	2g	30 min or IV push (3-5 min)	1-2	4	12	NA	Redose post-HD	12	ampicillin, amp/sulb, azithromycin, fluconazole, vancomycin
Ceftriaxone	2 g	30 min or IV push (3-5 min)	5.4-10.9	NA	NA	NA	NA	NA	ampicillin, amp/sulb, azithromycin, clindamycin, fluconazole, vancomycin
Clindamycin	900 mg	30 min	2-4	6	6	6	6	6	ampicillin, amp/sulb, azithromycin, ceftriaxone, fluconazole
Ertapenem	1000 mg	30 min	4	NA	NA	NA	NA	NA	ampicillin, amp/sulb, cefazolin, clindamycin
Fluconazole	400 mg or 6 mg/kg	≥ 60 to 120 min; do not exceed 200 mg/hour	30	NA	NA	NA	NA	NA	ampicillin, amp/sulb, ceftazidime, ceftriaxone, cefuroxime, clindamycin

Gentamicin	5 mg/kg based on total body weight (if total body weight >30% of ideal body weight, use adjusted body weight)	30 min	2-3	NA	NA	NA	Redose 2 mg/kg post-HD	NA	ampicillin, amp/sulb, azithromycin, pip/tazo
Levofloxacin	750 mg	60 min	6-8	NA	NA	NA	NA	NA	azithromycin, cefazolin, cefoxitin, meropenem, pip/tazo
Meropenem	1 g	30 min	1	2	4	8	Redose post-HD	4	amp/sulb, levofloxacin
Metronidazole	500 mg	30 min	6-8	12	12	12	Redose post-HD	12	aztreonam
Piperacillin-tazobactam	4.5 g	30 min	0.7-1.2	2	4	8	Redose post-HD	4	azithromycin, gentamicin, levofloxacin, vancomycin
				Liver transplantation and Whipple procedure: redose for up to 3 doses, then every 8 hours until end of surgery if necessary					
Vancomycin	15 mg/kg based on total body weight rounded up to nearest 250 mg (max 2.5 g)	1 g 60 min	4-8	12	NA	NA	Redose 7.5 mg/kg post-HD	12	ampicillin, amp/sulb, aztreonam, cefazolin, cefepime, cefoxitin, ceftazidime, ceftriaxone, cefuroxime
		1.25 g 75 min							
		1.5 g 90 min							
		1.75 g 105 min 2 g 120 min							

References:

1. American Society of Health-System Pharmacists. (2013). *ASHP therapeutic guidelines: Clinical practice guidelines for antimicrobial prophylaxis in surgery*. Retrieved from: <https://www.ashp.org/surgical-guidelines>