ANTIMICROBIAL	HALF-LIFE (NORMAL/ ESRD) hr	DOSE FOR NORMAL RENAL FUNCTION	METHOD (see footer)	ADJUSTMENT FOR RENAL FAILURE Estimated creatinine clearance (CrCl), mL/min			HEMODIALYSIS, CAPD	COMMENTS & DOSAGE FOR CRRT
				>50-90	10-50	<10		
ANTIBACTERIAL ANTIBIOTICS								
Carbapenem Antibiotics								
Ertapenem	4/>4	1gm q24h	D	1gm q24h	.0.5gm q24h (CrCl<30)	0.5gm q24h	HEMO: Dose as for CrCl<10; if dosed<6hrs prior to HD, give 150mg supplement AD	
Imipenem(see Comment)	1/4	0.5gm q6h	D&I	250-500mg q6-8h	250mg q6-12h **Dose for CRRT: 0.5-1gm bid** (AAC 49:2421, 2005)	125-250mg q12h	HEMO: Dose AD CAPD: Dose for CrCl<10	↑Potential for seizures if recommended doses exceeded in pts with CrCl<20mL per min. See pkg insert, esp. for pts<70 kg
Meropenem	1/6-8	1gm q8h	D&I	1gm q8h	1gm q12h **Same dose for CRRT**	0.5gm q24h	HEMO: Dose AD CAPD: Dose for CrCl<10	
Cephalosporin Antibiotics: DATA ON SELECTED **PARENTERAL** CEPHALOSPORINS								
Cefazolin	1.9/40-70	1-2gm q8h	I	q8h	q12h **Same dose for CRRT**	q24-48h	HEMO: Extra 0.5-1gm AD CAPD: 0.5gm q12h	
Cefepime	2.2/18	2gm q8h (max. dose)	D&I	2gm q8h	2gm q12-24h **Same dose for CRRT**	1gm q24h	HEMO: Extra 1gm AD CAPD: 1-2gm q48h	
Cefotaxime,	1.7/15-35	2gm q8h	I	q8-12h	q12-24h **Same dose for CRRT**	q24h	HEMO: Extra 1gm AD CAPD: 0.5-1gm q24h	Active metabolite of cefotaxime in ESRD. ↓ Dose further for hepatic&renal failure.
Ceftazidime	1.2/13-25	2gm q8hr	I	q8-12h	q12-24h **Same dose for CRRT**	q24-48h	HEMO: Extra 1gm AD CAPD: 0.5gm q24h	Since ½ dose is dialyzed, post-dialysis dose is max. of 3gm.
Sulbactam/ Cefoperazone	(1,1.7)/-	1.5-3g/day divided q 12 hr	D	100%	**15-30 :**1g (sulbactam) q 12 hr	**<15:**500mg (sulbactam)q12hr	HD : 1.5g Sulperazone AD CAPD : No adjustment	
Fluoroquinolone Antibiotics								
Ciprofloxacin	3-6/6-9	500-750mg po (or 400mg IV) q12h	D	100%	50-75% CRRT 400mg IV q24h	50%	HEMO: 250mg po or 200mg IV q12h CAPD: 250mg po or 200mg IV q8h	
Levofloxacin	6-8/76	750mg q24h IV, PO	D&I	750mg q24h	**20-49:** 750 q48h	**<20:**750mg once, then 500mg q48h	HEMO/CAPD: Dose for CrCl< 20	CRRT 750mg once, then 500mg q48h, although not FDA-approved
Moxifloxacin	12 ± 1.3 hours	400mg q24h IV, PO	No Dose Adjustment	100%	100%	100%	HD,CAPD: No adjustment	
ANTIBACTERIAL ANTIBIOTICS (continued)								
Vancomycin[1]	6/200-250	1 gm q 12h	D&I	1 gm q 12h	1 gm q 24-96h	1 gm q 4-7 days	HEMO/CAPD: Dose for CrCl <10	CAVH/CVVH: 500 mg q 24-48h New hemodialysis membrane ↑ clear of vanco: **check levels**
Amoxicillin/ Clavulanate[2]	1.3 AM/1 / 5-20/4	500/125 mg q8h (see *Comments*)	D&I	500/125 mg q8h	250-500 mg AM component q12h	250-500 mg AM component q24h	HEMO: As for CrCl <10; Extra dose after dialysis	**If CrCl ≤30 per mL, do not use 875/125 or 1000/62.5 AM/CL**
Pip (P)/Tazo (T)	0.71-1.2(both)/2-6	3.375-4.5 gm q6-8h	D&I	100%	2.25 gm q6h **<20: q8h Same dose for CRRT**	2.25 gm q8h	Hemo: Dose for Crcl <10 + extra 0.75 gm AD CAPD: 4.5 gm q12h; CRRT: 2.25 gm q6h	
ANTIVIRAL AGENTS for ANTIRETROVIRALS (see CID 40:1559, 2005)								
Acyclovir, IV	2-4/20	5-12.4 mg per kg q8h	D&I	100% q8h	100% q12-24h	50% q24h	HEMO: Dose AD CAPD: Dose for CrCl <10	Rapid IV infusion can cause ↑ Cr CRRT Dose: 5-10 mg/kg q24h

Abbreviation Key: Adjustment Method: **D**=dose adjustment, **I**=interval adjustment; **CAPD**=continuous ambulatory peritoneal dialysis; **CRRT**=continuous renal replacement therapy; **HEMO**=hemodialysis; **AD**=after dialysis; "**Supplement**"or "**Extra**" is to replace drug lost during dialysis – additional drug beyond continuation of regimen for CrCl< 10 mL/min