Generic Name	CrCl	Dose	Interval	Comments
Acyclovir IV	> 50 ml/min	5-10 mg/kg	Q 8hrs	Maintain adequate hydration
Zovirax	25-50 ml/min	5-10 mg/kg	Q 12hrs	and
	10-25 ml/min	5-10 mg/kg	Q 24hrs	Infuse over at least one hour to
	<10 ml/min	2.5-5 mg/kg	Q 24hrs	avoid nephrotoxicity
	Hemodialysis	2.5-5 mg/kg	Q 24hrs	Dose after HD
Aminoglycosides,	> 70 ml/min	1-2 mg/kg	Q 8hrs	Follow serum concentrations
***IV* Gentamicin &**	45-70 ml/min	1-2 mg/kg	Q 12hrs	Obese Pts use Dosing Wt
Tobramycin ##	30-44 ml/min	1-2 mg/kg	Q 18hrs	HD patients - Dose after HD
	20-29 ml/min	1-2 mg/kg	Q 24hrs	Consult ID, Renal or Pharmacy
	10-19 ml/min	1-2 mg/kg	Q 48hrs	See reverse side
				Extended Interval Guidelines
Amphotericin B Liposomal	> 10 ml/min	3 mg/kg	Q 24hrs	5 mg/kg/24hrs for
Ambisome	< 10 ml/min	3 mg/kg	Q 24-48hrs	severe infections
*** ID**				Round dose to nearest 50 mg
Amphotericin B	> 10 ml/min	0.5 mg-1 mg/kg	Q 24hrs	Pre-hydrate with 500 ml NS
Fungizone	< 10 ml/min	0.5 mg-1 mg/kg	Q 24-48hrs	to reduce nephrotoxicity
Ampicillin IV	> 50 ml/min	1-2 gm	Q 4-6hrs	Q 4 hrs for severe
Omnipen	10-50 ml/min	1-2 gm	Q 6-12hrs	infections
	< 10 ml/min	1-2 gm	Q 12-24hrs	Dose after HD
Ampicillin/Sulbactam	> 30 ml/min	1.5-3 gm	Q 6-8hrs	Max Daily dose: 3 gm Q6hrs
Unasyn	15-29 ml/min	1.5-3 gm	Q 12hrs	Dose Q8hrs in elderly w/ normal
	< 15 ml/min	1.5-3 gm	Q 24hrs	renal function
	Hemodialysis	1.5-3 gm	Q 24hrs	Dose after HD
Amoxicillin/Clavulanic acid	> 30 ml/min	250-500 mg	Q 8hr	Alternate dosing with normal
Augmentin	10-30 ml/min	250-500 mg	Q 12hrs	renal function: 875mg Q12hrs
	< 10 ml/min	250-500 mg	Q 24hrs	Dose after HD
Azithromycin PO	> 10 ml/min	500mgx1d;250mgx5d	Q 24hrs	
Zithromax	< 10 ml/min	500mgx1d;250mgx5d	Q 24hrs	
Aztreonam *ID	> 30 ml/min	500 mg-2 gm	Q 8-12hrs	Decrease dose by 20-25%
Azactam	10-30 ml/min	500 mg-1gm	Q 8-12hrs	for patients with hepatic in-
##	< 10ml/min	125-500 mg	Q 8-12hrs	sufficiency, especially if con-
				current renal impairment
				Dose after HD
Cefazolin	>50 ml/min	1-2 gm	Q 8hrs	
Kefzol	30-50 ml/min	1-2 gm	Q 12 hrs	
	10-30 ml/min	1 gm	Q 24hrs	
	< 10 ml/min	1 gm	Q 24-48hrs	
	Hemodialysis	1 gm	Q HD	Dose after HD
Cefepime	> 60 ml/min	2 gm	Q 8hrs	
Maxipime	30-60 ml/min	2 gm	Q 12hrs	
Febrile Neutropenia	10-29 ml/min	2 gm	Q 24hrs	
	< 10 ml/min	1 gm	Q 24hrs	Dose after HD
Cefepime *ID	> 60 ml/min	1-2 gm	Q 12hrs	
Maxipime	30-60 ml/min	1-2 gm	Q 24hrs	
Non Neutropenia	10-29 ml/min	500 mg-1 gm	Q 24hrs	
	< 10 ml/min	250mg-500mg	Q 24hrs	Dose after HD

Generic Name	CrCl	Dose	Interval	Comments
Cefpodoxime	> 30 ml/min	200 mg	BID	400mg bid for severe skin &
Vantin	< 30 ml/min	200 mg	Q 24hrs	soft tissue infections
	Hemodialysis	200 mg	Q HD	Dose after HD
Ceftazidime *ID	> 50 ml/min	1-2 gm	Q 8hrs	Reserve for anti-pseudomonal
Fortaz	31-50 ml/min	1-2 gm	Q 12hrs	use
##	16-30 ml/min	1-2 gm	Q 24hrs	
	6-15 ml/min	0.5-1 gm	Q 24hrs	
	< 5 ml/min	0.5-1 gm	Q 48hrs	
	Hemodialysis	1 gm	Q HD	Dose after HD
Ceftriaxone	< 10ml/min	1 gm	Q 24hrs	If both ESRD & ESLD max
Rocephin				dose 2 gm/day, dose after HD
Chloramphenicol IV	> 10 ml/min	12.5 mg/kg	Q 6hrs	Round to nearest 100 mg
Chloromycetin	< 10 ml/min	12.5 mg/kg	Q 6hrs	Max total daily dose 4 gm
Cidofovir IV *ID	> 55 ml/min	5 mg/kg**	Q wk x2 doses	****Induction Dose**
Vistide			**Induction**	If SCr increases by 0.3 mg/dl
				reduce dose to 3mg/kg
	> 55 ml/min	5 mg/kg	Q 2 Weeks	Discontinue therapy if SrCr
			Maintenance	increases by 1.5 mg/dl
				Use same dosage adjustment
				for induction during maint. tx
Ciprofloxacin IV *ID	> 30 ml/min	200-400 mg	Q 12hrs	IV should be reserved for
Cipro	10-30 ml/min	200-400 mg	Q 24hrs	patients that are NPO
##	Hemodialysis	200-400 mg	Q 24hrs	Dose after HD
Ciprofloxacin PO	> 30 ml/min	250-750 mg	Q 12hrs	PO drug interaction with ;
Cipro	10-30 ml/min	250-750 mg	Q 24hrs	Ca, Mg, Zn, Fe, Al
##	Hemodialysis	250-750 mg	Q 24hrs post HD	Separate administration by
				2-4 hours from quinolone dose
Clarithromycin	> 30 ml/min	500 mg	BID	* 500 mg TID for H. Pylori
Biaxin	< 30 ml/min	250 mg	BID	**Reduce dose for Hepatic
				Disease
Clindamycin IV	> 5 ml/min	300-600 mg	Q 8hrs	900 mg Q 6hrs for CNS
	Hemodialysis	300-600 mg	Q 8hrs	Toxoplasmosis Infection
Digoxin IV	> 50 ml/min	0.125-0.25 mg	Q 24hrs	Draw level 6-8h after dose in
(Maintenance Dose)	< 50 ml/min	0.125 mg	Q 24-48hrs	normal renal function. In ESRD,
Lanoxin				draw level 12h after dose
				Not readily removed by HD/PD
Digoxin IV	> 50 ml/min	LD: 8-12 mcg/kg	divided into 3-4 doses	
Loading Doses	< 50 ml/min	LD: 6-10 mcg/kg	divided into 3-4 doses	
Doxycycline IV or PO	> 10 ml/min	50-100 mg	Q 12hrs	
	< 10 ml/min	50-100 mg	Q 12hrs	
Enoxaparin SC	> 30 ml/min	30 mg	Q 12hrs	* 40 mg SC Q24hrs approved for:
Lovenox		40 mg	Q 24hrs*	Hip replacement surgery beginning
DVT Prophylaxis	<30 ml/min	30 mg	Q 24 hrs	POD 7 following days 1-7 of
				30 mg Q 12 hrs; Medical patients
				with severely restricted mobility;
				Pregnancy

Generic Name	CrCl	Dose	Interval	Comments
Enoxaparin SC	> 60 ml/min	1 mg/kg	Q 12hrs	
Lovenox	30-60 ml/min	0.84 mg/kg	Q 12hrs	
Inpatient treatment	<30 ml/min	1 mg/kg	Q 24 hrs	
PE and/or DVT				
Erythromycin IV	> 10 ml/min	0.5-1 gm	Q 6hrs	Otoxicity associated with
	< 10 ml/min	250-500 mg	Q 6hrs	high doses in renal failure
Ethambutol	> 50 ml/min	15 mg/kg/day	Q 24hrs	Max dose 2.5 gm/day
Myambutol	10-50 ml/min	15 mg/kg/day	Q 24-36hrs	
	< 10 ml/min	15 mg/kg/day	Q 48hrs	
	Hemodialysis	15 mg/kg/day	Q HD	Dose after HD
Famotidine IV or PO	> 50 ml/min	20 mg	Q 12hrs or	
		40 mg	Q HS	
	< 50 ml/min	20 mg	Q 24hrs	
Fluconazole IV* or PO	> 50 ml/min	100-400 mg	Q 24hrs	Oral Daily Doses < or = 200 mg
Diflucan	11-50 ml/min	100-200 mg	Q 24hrs	Do Not Require ID Approval
##	< 10 ml/min	100-200 mg	Q 48hrs	Dose after HD
**** IV Needs ID Approval***				IV should be reserved for
				patients that are NPO
Flucytosine	> 40 ml/min	12.5-37.5 mg/kg	Q 6hrs	If receiving HD q 48-72h, then
Ancobon	20-40 ml/min	12.5-37.5 mg/kg	Q 12hrs	37.5 mg/kg immediately after
	10-20 ml/min	12.5-37.5 mg/kg	Q 24hrs	each HD
	< 10 ml/min	37.5 mg/kg	Q 48hrs	
Gabapentin	> 60 ml/min	300-600 mg	Q 8hrs	In Renal Dysfunction may titrate
Neurontin	30-60 ml/min	300 mg	Q 12hrs	to higher doses if tolerated
	15-30 ml/min	300 mg	Q 24hrs	
	< 15ml/min	300 mg	Q 48hrs	
	Hemodialysis	200-300 mg	Q HD	Dose after HD
Ganciclovir IV	> 70 ml/min	5 mg/kg	Q 12hrs	Give via central line if possible
Cytovene	50-69 ml/min	2.5 mg/kg	Q 12hrs	Contraindicated in pts with
Induction Therapy	25-49 ml/min	2.5 mg/kg	Q 24hrs	allergy to Acyclovir
(14-21 days)	10-24 ml/min	1.25 mg/kg	Q 24hrs	
	< 10 ml/min	1.25 mg/kg	Q HD	Dose after HD ; 3x/week
Ganciclovir IV	> 70 ml/min	5 mg/kg	Q 24hrs	
Cytovene	50-69 ml/min	2.5 mg/kg	Q 24hrs	
Maintenance Therapy	25-49 ml/min	1.25 mg/kg	Q 24hrs	
	10-24 ml/min	0.625 mg/kg	Q 24hrs	
	< 10 ml/min	0.625 mg/kg	Q HD	Dose after HD: 3x/week
Ganciclovir IV	> 70 ml/min	5 mg/kg	Q 24hrs	Prophylaxis:
Cytovene	50-69 ml/min	2.5 mg/kg	Q 24hrs	Maintenance dose
Prophylaxis:	25-49 ml/min	1.25 mg/kg	Q 24hrs	is 1/2 the prophylaxis
Induction Therapy	10-24 ml/min	0.625 mg/kg	Q 24hrs	induction dose
(7-14 days)	< 10ml/min	0.625 mg/kg	Q HD	Dose after HD
Imipenem IV *ID	> 70ml/min	500 mg	Q 6hrs	Use of a 500mg dose in
Primaxin	30-70 ml/min	500 mg	Q 6-8hrs	patients with CrCl < 20 ml/min
##	20-29 ml/min	500 mg	Q 8-12hrs	is associated with increased risk
	5-20 ml/min	250 mg	Q 12hrs	of seizure
	Hemodialysis	250 mg	Q 12hrs	Dose after HD

Generic Name	CrCl	Dose	Interval	Comments
Lepirudin IV	> 60 ml/min	0.4 mg/kg	bolus dose	Max bolus dose: 44mg IV
Refludan		0.15 mg/kg/hr	infusion dose	Max infusion rate: 16.5 mg/hr
Anicoagulation dosing				If lepirudin infusion is halted due
for patiens with HIT	45-60 ml/min	0.2 mg/kg	bolus dose	to acute renal failure (HD)
	45-60 ml/min	0.075 mg/kg/hr	infusion dose	bolus inj. of 0.1 mg/kg IV QOD
				may be administered only if
	30-44 ml/min	0.2 mg/kg	bolus dose	the (aPTT) ratio falls below
	30-44 ml/min	0.045 mg/kg/hr	infusion dose	therapeutic target. No bolus
				if aPTT is 1.5-2 times baseline
	15-29 ml/min	0.2 mg/kg	bolus dose	
	15-29 ml/min	0.0225 mg/kg/hr	infusion dose	
	< 15 ml/min	no infusion	heme consult recommended	
Levofloxacin PO	> 50 ml/min	500 mg	Q 24hrs	PO drug interaction with;
Levaquin	20-49 ml/min	250 mg	Q 24hrs	Ca, Mg, Zn, Fe, Al
	10-19 ml/min	250 mg	Q 48hrs	Separate administration by
	Hemodialysis	250 mg	Q 48hrs	2-4 hours from quinolone dose
Levofloxacin IV	> 50 ml/min	500 mg	Q 24hrs	IV should be reserved for
Levaquin	20-49 ml/min	250 mg	Q 24hrs	patients that are NPO
##	10-19 ml/min	250 mg	Q 48hrs	
ID Approval for Specific Indications	Hemodialysis	250 mg	Q 48hrs	
Linezolid IV or PO *ID	> 10ml/min	600 mg	Q 12hrs	
Zyvox	< 10 ml/min	600 mg	Q 12hrs	Dose after HD
Meropenem *ID	> 50 ml/min	1 gm	Q 8hrs	
Merrem	26-50 ml/min	1 gm	Q 12hrs	
##	10-25 ml/min	500 mg	Q 12hrs	
	< 10 ml/min	500 mg	Q 24hrs	Dose after HD
Metronidazole IV or PO	> 10 ml/min	500 mg	Q 8-12hrs	Active metabolites have long
Flagyl	< 10 ml/min	500 mg	Q 12hrs	t 1/2 in ESRD. Dose after HD
Minocycline IV or PO	> 10 ml/min	100 mg	BID	Give via central line
	< 10 ml/min	100 mg	BID	Max dose 400 mg/ 24hrs
Oxacillin	> 30 ml/min	2 gms	Q 4-6hrs	Q 4 hrs for severe
Bactocil	< 10 ml/min	1-2 gm	Q 4-6hrs	infections
Penicillin	> 50 ml/min	0.5-4 MU	Q 4hrs	Max dose in ESRD - 6 MU/day
	10-50 ml/min	0.5-3 MU	Q 4-6hrs	Dose after HD
	< 10 ml/min	1 MU	Q 4-8hrs	
	Hemodialysis	1 MU	Q 4-8hrs	
Pentamidine	> 50 ml/min	4 mg/kg/day	Q 24hrs	Infuse over no less than
Pentam	10-50 ml/min	4 mg/kg/day	Q 24-36hrs	60 minutes
	< 10 ml/min	4 mg/kg/day	Q 48hrs	
Piperacillin	> 50 ml/min	2-4 gm	Q 4-6hrs	
	10-50 ml/min	2-4 gm	Q 6hrs	
	<10 ml/min	2-4 gm	Q 8hrs	
	HD	2 gm	Q 8hrs	

Generic Name	CrCl	Dose	Interval	Comments
Piperacillin/Tazobactam	> 40 ml/min	4.5 gm	Q 6-8hrs	May increase bleeding time,
Zosyn	20-40 ml/min	2.25 gm	Q 6hrs	especially in ESRD. May inacti-
*** ID**	< 20 ml/min	2.25 gm	Q 8hrs	vate gentamicin or tobramycin
	Hemodialysis	2.25 gm	Q 12hrs	due to complexation
Procainamide IV	> 80 ml/min	3.0-3.5 mg/min	cont. inf	LD : 15 mg/kg IV, over 30 min
Maintenance	40-80 ml/min	2.5-3.0 mg/min		MAINT Target level = 4-8 mg/L
	25-40 ml/min	2.0-2.5 mg/min		
	< 25 ml/min	1.5-2.0 mg/min		
*If Level Therapeutic, IV to PO conversion=Total 24hr mg IV dose divided by 0.85=Total PO Dose (divided into 4-6 doses)				
Pyrazinamide	> 50 ml/min	15-30 mg/kg	Q 24hrs	Up to 2 gms/day
	< 50 ml/min	Avoid or reduce to 12 mg/kg	Q 24hrs	
Ranitidine PO	> 50 ml/min	150 mg	Q 12hrs	Dose after HD
Zantac	< 50 ml/min	150 mg	Q 24hrs	
Rifampin IV * or PO	> 10 ml/min	600 mg	Q 24hrs	TB dosing only
Rifadin	< 10 ml/min	300 mg	Q 24hrs	**** IV Needs ID Approval***
Synercid *ID	> 10 ml/min	7.5 mg/kg	Q 8-12hrs	Infuse over 60 minutes
Dalfopristin/Quinupristin	< 10 ml/min	7.5 mg/kg	Q 8-12hrs	Dose after HD
Trimethoprim/	> 30 ml/min	15-20mg/kg/day	Q 6-8hrs	Dose is in mg TMP/kg/day
Sulfamethoxazole: IV or PO	15-29 ml/min	15-20 mg/kg/day; then 7-10 mg/kg/day	Q 6-8hrsx2d Q 12hrs	For oral doses, round to the nearest 80 mg
Bactrim				
(PCP)	< 15 ml/min	7-10 mg/kg/day	Q 12hrs	
	Hemodialysis	10 mg/kg/day	Q HD	Dose after HD
Trimethoprim/	> 30 ml/min	8-12 mg/kg/day	Q 6-8hrs	Dose is in mg TMP/kg/day
Sulfamethoxazole: IV or PO	15-29 ml/min	8-12 mg/kg/day	Q 6-8hrsx2d	For PO Doses, round to the
(NON PCP)		then 4-6 mg/kg/day	Q 12hrs	nearest 80mg
Bactrim	< 15 ml/min	4-6 mg/kg/day	Q 12-24hrs	
	Hemodialysis	6 mg/kg	Q HD	Dose after HD
Valganciclovir PO	> 60 ml/min	900 mg	BID	
Valcyte	40-59 ml/min	450 mg	BID	
CMV Treatment:	25-39 ml/min	450 mg	QD	
Induction Therapy	10-24 ml/min	450 mg	QOD	
(14-21 days)	< 10 ml/min	consult pharmacy		
Valganciclovir PO	> 60 ml/min	900 mg	QD	
Valcyte	40-59 ml/min	450 mg	QD	
CMV Treatment:	25-39 ml/min	450 mg	QOD	
Maintenance Therapy	10-24 ml/min	450 mg	2x/week	
	< 10 ml/min	consult pharmacy		
Valganciclovir PO	> 60 ml/min	900 mg	QD	Prophylaxis: maintenance
Valcyte	40-59 ml/min	450 mg	QD	dose is 1/2 the prophylaxis
CMV Prophylaxis:	25-39 ml/min	450 mg	QOD	induction dose
Induction Therapy	10-24 ml/min	450 mg	2x/week	
	< 10 ml/min	consult pharmacy		
Vancomycin IV	> 45 ml/min	750 mg	Q 12hrs	ID approval needed after 72hrs
(40-59 kg)	30-44 ml/min	500 mg	Q 24hrs	CrCl < 15ml/min or Dialysis Pts;
Vancocin	15-29 ml/min	500 mg	Q 48hrs	500 mg x 1
	< 15 ml/min	Consult Pharmacy		repeat dose by level
				Infuse over at least 60 mins

Generic Name	CrCl	Dose	Interval	Comments
Vancomycin IV	> 45 ml/min	1 gm	Q 12hrs	ID approval needed after 72hrs
(60-79 kg)	30-44 ml/min	1 gm	Q 24hrs	CrCl < 15 ml/min or Dialysis Pts;
Vancocin	15-29 ml/min	1 gm	Q 48hrs	1000 mg x 1
	< 15 ml/min	Consult Pharmacy		repeat dose by level
				Infuse over at least 60 mins
Vancomycin IV	> 45 ml/min	1 gm	Q 12hrs	ID approval needed after 72hrs
(> 80 kg)	30-44 ml/min	1 gm	Q 24hrs	CrCl , 15 ml/min or Dialysis Pts ;
Vancocin	15-29 ml/min	1 gm	Q 48hrs	1000 mg x 1
	< 15 ml/min	Consult Pharmacy		repeat dose by level
				In Obese Pts use Dosing Wt
				Infuse over at least 60 mins

EXTENDED INTERVAL AMINOGLYCOSIDE DOSING GUIDELINES

Eligible patients: Those with:

- Adequate urine output (i.e.: > 0.5 ml/kg/hr or > 800 ml/24h) ***and***
- WBC count > 1000 cells/µL

Extended Interval Dosing of aminoglycosides is **NOT RECOMMENDED** due to lack of data or unpredictable kinetics in:

- Pregnant patients
- Patients with endocarditis, cystic fibrosis, severe burns, ascites
- Neutropenic patients (ANC < 1000)
- Patients with **CrCl < 20 mL/min**
- Patients who are dialysis dependent

Dosing	**Interval:**	**based on CrCl**
Initial dose = 5-6 mg/kg*†	> 60 ml/min	Q24h
	40-60	Q36h
	20-40	Q48h

* Consider 7 mg/kg in known Pseudomonas infections

† Use actual body weight (ABW) for patients not > 25% over ideal body weight (IBW)

† Use dosing weight (DW) for patients > 25% over IBW

KEY

= Patients requiring adjusted maintenance doses (for renal & hepatic insufficiency) should receive an initial full dose followed by an adjusted dose

*** ID = Requires ID Approval. Page 39244, the ID Fellow on-call, for antibiotic approvals between 7 a.m. and 11 p.m. During the hours of 11 p.m. to 7 a.m., ID approval is deferred and the Pharmacy will dispense sufficient quantities of ID restricted medications to treat the patient until 7 a.m. It is the responsibility of the prescriber to obtain ID approval at 7 a.m. for continued therapy.**

Select References:

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4. St. Peter WL, Redic-Kill KA, Halstenson CE. Clinical Pharmacokinetics of Antibiotics in Patients with Impaired Renal Function. 1992 Clinical Pharmacokinetics. 22:169-210
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USEFUL FORMULAS

Ideal Body Weight (IBW)

IBW - Male = 50 kg + (2.3 kg x each inch > 60 inches) = _____kg

IBW - Female = 45 kg + (2.3 kg x each inch > 60 inches) = _____kg

Actual Body Weight (ABW) Use ABW unless patient is obese or 25% greater than over IBW

Dosing Weight (DW) Use DW in obese patients where ABW is 25% > IBW

DW = IBW + (ABW - IBW) x 0.4 = _____kg

Creatinine Clearance

Est CrCl (male) = (140 - age) x IBW / 72 x SCr = _____ ml/min

Est CrCl (female) = [(140 - age) x IBW] x 0.85 / 72 x SCr = _____ ml/min

** To calculate estimated CrCl in patients > 65 yrs or weight < IBW or muscle atrophy **and** SrCr < 0.7 mg/dl, use 1.0 mg/dl value for SrCr to estimate CrCl*

IV TO PO CONVERSION

Evaluation for conversion from parenteral to oral therapy should be an ongoing process

Criteria for early conversion from IV to PO are:

1. Patient is tolerating an oral diet for ≥ 24 hours
2. Patient tolerating other oral medications for ≥ 24 hours
3. No evidence of hyperemesis, bowel obstruction or malabsorption
4. Clinically stable and improving as evidenced by:
   a. Temperature <101 F for ≥ 24 hours
   b. Hemodynamically stable, not on pressors

Parenteral and oral bioavailability are nearly equivalent and published outcomes are similar for the following medications:

Ciprofloxacin, Fluconazole, Levofloxacin, Linezolid, Metronidazole

Additional medications with high oral bioavailability include:

Amoxicillin/clavulanic acid (Augmentin), Cephalexin, Clindamycin, Famotidine

IV TO PO CONVERSION / COST COMPARISON CHART

IV DRUG	PO EQUIVALENT	COST IV / PO
Ampicillin/sulbactam	Augmentin 500mg q8h	$24.00-$40.00 / $6.30
1.5 - 3 gm Q6hrs	or 875mg q12h	
Cefazolin 1 gm q8h	Cephalexin 500mg q6h	$7.25 / $0.55
Ciprofloxacin 400mg q12h	Ciprofloxacin 500mg q12h	$48.50 / $0.78
Clindamycin 300-600 mg q8h	Clindamycin 300-450mg q6h	$18.60-$21.00 / $3.50 - $5.20
Famotidine 20mg q12h	Famotidine 20mg q12h	$5.45 / $0.16
Fluconazole 400 mg q24h	Fluconazole 400 mg q24h	$131.78 / $25.00
Levofloxacin 500 mg q24h	Levofloxacin 500 mg q24h	$15.60 / $7.25
Linezolid 600 mg q12h	Linezolid 600 mg q12h	$133.25 / $100.50
Metronidazole 500 mg q8h	Metronidazole 500mg q8h	$3.80 / $0.21

EXTEDNED INTERVAL AMINOGLYCOSIDE SERUM DRUG LEVELS

- **DO NOT ORDER** peak or random levels
- Trough level can be drawn immediately before the second dose
- Adjust dose and/or interval based on serum drug trough level

  Gentamicin, Tobramycin:
  Trough level < 1 mcg/ml - continue present extended interval dosing
  Trough level > 1 mcg/ml - increase interval proportionally

- In general, aminoglycoside trough levels should be ordered in patients:
  - Receiving or expected to receive > 5 days therapy
  - With significant changes in renal function

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Renal Dosing Guidelines

2004

The BIDMC renal dosing guidelines provide general dosing and administration recommendations for common medications that require adjustment in patients with renal dysfunction or renal insufficiency.

Use of the guidelines is intended to improve the safety and efficacy of medication therapy in this patient population.

Recommendations provided here are derived from a review of evidence based literature, medication-specific pharmacokinetic parameters and manufacturers' guidelines. While the guidelines serve as a useful reference tool for the majority of patients, patient-specific conditions and clinical circumstances may require dose modification to meet individual patient care needs.