

TABLE 10. Dosage adjustment in renal insufficiency

Drugs	Normal dose	Dosage adjustment in renal insufficiency	
		Creatinine clearance (mL/min)	Dose
Acyclovir	IV dose for serious HSV/VZV infections: 10 mg/kg body weight q8h	25–50	10 mg/kg body weight q12h
		10–25	10 mg/kg q24h
		0–10	10 mg/kg q48h
	PO dose for Herpes zoster: 800 mg q4h (5x/day)	10–25	800 mg q8h
		0–10	800 mg q12h
Amikacin	10–15 IV mg/kg/day	Dosage adjustment based on serum levels	
Amphotericin B	0.5–1.0 mg/kg body weight/day IV	No dosage adjustment necessary; alternative amphotericin B preparation or other antifungals might be considered if renal insufficiency occurs during therapy	
Cidofovir	5 mg/kg IV two times each week, then every 2 wks (with probenecid and hydration)	If increased 0.3–0.4 mg/dL >baseline If increased $\geq$ 0.5 mg/dL >baseline or $\geq$ 3+ proteinuria	3 mg/kg per dose d/c therapy
Ciprofloxacin	500 mg PO BID	30–50	250 mg q12hr
		5–29	250 mg q18h (or 375 mg q24h) 250 mg q24hr (given after dialysis)
		Patients on hemodialysis or peritoneal dialysis	
Clarithromycin	500 mg PO BID	<30	250 mg BID or 500 mg QD
Ethambutol	15 mg/kg q24h PO	10–50	15 mg/kg q24-36h
		<10 hemodialysis	15 mg/kg q48h 15 mg/kg TIW after hemodialysis
Fluconazole	200-800 mg PO or IV QD	$\geq$ 50	Full dose
		<50 hemodialysis	50% of full dose full dose after dialysis
Flucytosine	25 mg/kg PO Q6H	20–40	25 mg/kg q12h
		10–20 hemodialysis	25 mg/kg q24h 25-50 mg/kg q48-72h (after hemodialysis)
Foscarnet	120-180 mg/kg/day	Dosage adjustment according to calculated CrCl/kg; consult package labeling for dosing table	
Ganciclovir	Induction therapy: 5 mg/kg IV q12h	50–69	2.5 mg/kg q12h
		25–49	2.5 mg/kg q24h
		10–24	1.25 mg/kg q24h
		<10 or on hemodialysis	1.25 mg/kg tiw after dialysis
	Maintenance Therapy 5 mg/kg IV q24h	50–69	2.5 mg/kg q24h
		25–49	1.25 mg/kg q24h
		10–24	0.625 mg/kg q24h
		<10 or on hemodialysis	0.625 mg/kg tiw after dialysis
Lamivudine	For HIV/HBV co-infected Patients – 150 mg BID or 300 mg QD	30–49	150 mg QD
		15–29	150 mg x 1, then 100 mg QD
		5–14	150 mg x 1, then 50 mg QD
		<5 or on hemodialysis	50 mg x 1, then 25 mg QD
Levofloxacin	500 mg PO QD	20–49	250 mg q24h
		10–19	250 mg q48h
		Hemodialysis or continuous ambulatory peritoneal dialysis	250 mg q48h

TABLE 10. (Continued) Dosage adjustment in renal insufficiency

Drugs	Normal dose	Dosage adjustment in renal insufficiency	
		Creatinine clearance (mL/min)	Dose
Aqueous penicillin G	Neurosyphilis or Ocular Syphilis 3-4 million units (MU) IV q4h	10–50	2-3 MU q4h
		<10	1 MU q4-6h
		Hemodialysis	1 MU q4-6h
Ribavirin	1,000–1,200 mg/day (based on weight)	<50	Not recommended
Rifabutin	300 mg daily (or adjustment based on drug-drug interaction)	<30	50% of dose*
Streptomycin	1 g IM or IV q24h	10–50	1 g q24–72h
		<10	1 g q72–96 h
		Hemodialysis	Supplemental 500 mg after hemodialysis (unless 1 g dose is scheduled around the same time)
Sulfamethoxazole/ Trimethoprim	15–20 mg/kg/day (of TMP) IV or PO in 3–4 divided doses	15–30	5 mg/kg q6-8h x 48 hr, then 3.5-5 mg/kg q12h
		<15	7–10 mg/kg/day in 1–2 divided doses
		Hemodialysis	7–10 mg/kg after dialysis
Tenofovir	For HIV (in HBV patients) 300 mg PO QD	30–49	300 mg q48h
		10–29	300 mg twice weekly
		End stage renal disease or hemodialysis	300 mg once weekly
Valacyclovir	For Herpes Zoster 1 g PO TID	30–49	1 g PO q12h
		10–29	1 g PO q24h
		<10	500 mg PO q24h
		Hemodialysis	500 mg PO q24h, schedule timing of dose after dialysis
Valganciclovir	900 mg PO BID (induction) 900 mg PO QD (maintenance)	40–59	<b>Induction</b> 450 mg BID
		25–39	450 mg QD
		10–25	450 mg QOD
		Hemodialysis	Not recommended
			<b>Maintenance</b> 450 mg QD 450 mg QOD 450 mg BIW Not recommended
Voriconazole	IV dose: 6 mg/kg body weight g12h as loading dose, then 4 mg/kg g12h	≤50	Consider switching to PO dosing; SBECV vehicle might accumulate in patients with renal insufficiency

IV = intravenous; PO = oral; QD = daily; BID = twice a day; TID = three times daily; TIW = three times weekly; g'n'h = every 'n' hour.

\* To prevent underdosing, some specialists prefer to use standard dose and measure drug levels.