DIAMS HSgB

ANTIMICROBIAL STANDARD & RENAL ADJUSTED DOSE

For General & Specific Indications

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Launched: August 2021
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Only for internal circulation (HSgB).
For further enquiries, kindly contact ext. 4126

DIAMS
(DAILY INTEGRATION OF ANTIMICROBIAL STEWARDSHIP)

ANTIMICROBIAL STANDARD DOSE & RENAL ADJUSTED DOSE IN ADULTS (FOR GENERAL & SPECIFIC INDICATIONS)

Launched: August 2021. Latest Update: 19 June 2025

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Tips! How to choose your renal adjusted dose:
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Creatinine Clearance (CrCl) Calculation (mL/min) → Click here for CrCl Calculator	
Male: (140 - age in years) x (weight in kg) x (**1.23**) (serum creatinine in µmol/L)	**Female:** (140 - age in years) x (weight in kg) x (**1.04**) (serum creatinine in µmol/L)

DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Abacavir (ABC) (Ziagen)	600 mg PO q24h (preferred) ***or*** 300 mg PO q12h	N/A	No dosage adjustment required.
Abacavir / Lamivudine (ABC/3TC) (Kivexa)	ABC 600 mg/3TC 300 mg (= 1 tablet) PO once daily	<50	Co-formulated tablet **is not recommended** in CrCl < 50. Use split pills and adjust dose according to recommendations for the individual drugs: • ***Abacavir (ABC) (Ziagen)*** • ***Lamivudine (3TC)***
Acyclovir (Zovirax)	**IV Dose** **Serious Herpes Simplex (HSV) Infections:** • 5 mg/kg IV q8h* **Herpes Simplex (HSV) Encephalitis,** or **Varicella Zoster (VZV) Infections:** • 10 mg/kg IV q8h* ****Dosing in obesity: Manufacturer recommends using IBW. However, some references suggest using AdjBW for severe infections.***	26–50	100% of dose IV q12h
		10–25	100% of dose IV q24h
		<10	50% of dose IV q24h
		HD	50% of dose IV q24h [Administer dose after HD on dialysis day]
	PO Dose **Herpes Zoster (HZV),** or **Varicella Zoster (VZV):** • 800 mg PO five times/day	10–25	800 mg PO q8h
		<10	800 mg PO q12h
		HD	800 mg PO q12h [Administer dose after HD on dialysis day]
	PO Dose **Herpes Simplex (HSV) Orolabial/Genital Lesions:** • 400 mg PO q8h	10-25	200 - 400 mg PO q8h
		<10 or HD	200 mg PO q12h

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		CrCl (mL/min)*	ADJUSTED DOSE
Akurit-2 Each tablet contains: Rifampicin 150 mg, Isoniazid 75 mg	**Treatment of tuberculosis (Maintenance phase):** Weight-based dosing: • 30 - 37 kg: 2 tablets PO q24h • 38 - 54 kg: 3 tablets PO q24h • 55 - 70 kg: 4 tablets PO q24h • > 70 kg: 5 tablets PO q24h	N/A	No dosage adjustment required
Akurit-4 Each tablet contains: Rifampicin 150 mg, Isoniazid 75 mg, Pyrazinamide 400mg, Ethambutol 275 mg	**Treatment of tuberculosis (Intensive phase):** Weight-based dosing: • 30 - 37 kg: 2 tablets PO q24h • 38 - 54 kg: 3 tablets PO q24h • 55 - 70 kg: 4 tablets PO q24h • > 70 kg: 5 tablets PO q24h	<30 or HD	Co-formulated tablet **is not recommended** in CrCl <30 ml/min. Use split pills and adjust dose according to recommendations for the individual drugs: • ***Isoniazid (INH)*** • ***Rifampicin (RIF)*** • ***Ethambutol (EMB)*** • ***Pyrazinamide (PZA)***
Albendazole	Dose & duration of Albendazole varies with specific parasite **Usual dose:** • 400 mg as a single dose **Neurocysticercosis*:** • 15 mg/kg/day in 2 divided doses, with food (Max: 1200 mg/day) ** PLUS/MINUS Praziquantel & Corticosteroid*	N/A	No dosage adjustment required (Albendazole is not cleared by the kidney)

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY		
		CrCl (mL/min)*		ADJUSTED DOSE
Amikacin	**Single Daily Dosing (SDD)** 15 mg/kg IV q24h ***or*** **Multiple Daily Dosing (MDD)** 7.5 mg/kg IV q12h **ESBL-E, AmpC-E, CRE or DTR *Pseudomonas aeruginosa*:** **1. Uncomplicated UTI:** • 15 mg/kg/dose IV × 1 dose **2. All other infections:** • 15 mg/kg/dose IV × 1 dose; subsequent doses and dosing interval based on TDM ***Use with caution in patients with renal insufficiency and family history of ototoxicity*** ***[Click here to refer to body weight to be used for Aminoglycosides]***	Adjust dose based on serum concentrations. Target levels:		
		SDD: Trough: <1 mg/L (< 1.7 µmol/L) Peak: ~60 mg/L (~102 µmol/L)		**MDD:** Trough: <10 mg/L (< 17 µmol/L) Peak: 20-30 mg/L (34-51 µmol/L)
		SDD	60-80	12 mg/kg IV q24h
			40-60	7.5 mg/kg IV q24h
			30-40	4 mg/kg IV q24h
			< 30	**Refer to Amikacin MDD**
		MDD	10-50	7.5 mg/kg IV q24h
			< 10	7.5 mg/kg IV q48h
			HD	7.5 mg/kg IV q48h [Administer dose after HD on dialysis day. Re-dose when level is <10 mg/L (< 17 µmol/L)]
Amoxicillin	**Usual dose:** • 500 - 1,000 mg PO q8h **H. pylori eradication therapy*:** • 1,000 mg PO q12h **** In combination with Clarithromycin & Proton Pump Inhibitor (PPI)***	10-30		100% of normal dose PO q12h
		<10 or HD		100% of normal dose PO q24h [Administer dose after HD on dialysis day]

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Amoxycillin/ Clavulanate (Augmentin)	**IV Dose** **Usual dose:** • 1,200 mg IV q8h **Serious infections, Liver abscess, Lung abscess or Empyema:** • 1,200 mg IV q6-8h	30-50	1,200 mg IV q8h
		10-29	1,200 mg IV q12h
		< 10 or HD	1,200 mg IV q12-24h [Administer dose after HD on dialysis day]
	PO Dose: **Usual dose:** • 625 mg (=1 tablet) PO q8h	10-30	625 mg PO q12h
		<10 or HD	625 mg PO q12h* [Administer dose after HD on dialysis day] **HSgB Nephrologists' consensus based on expert opinion*
	PO Dose: **Melioidosis eradication/maintenance therapy** • **<60 kg:** 1,250 mg (= 2 tablets) PO q8h • **>60 kg:** 1,875 mg (= 3 tablets) PO q8h	10-30	100% of normal dose PO q12h
		<10 or HD	100% of normal dose PO q24h [Administer dose after HD on dialysis day]
Ampicillin	**IV dose:** **Usual dose:** • 1 - 2 gm IV q4-6h **Bone/joint infections, Endocarditis or Meningitis:** • 2 gm IV q4h	If Original dose: **1-2 gm IV q6h** — 30-50	1 - 2 gm IV q8h
		If Original dose: **1-2 gm IV q6h** — 15-29	1 - 2 gm IV q12h
		If Original dose: **1-2 gm IV q6h** — <15 or HD	1 - 2 gm IV q24h [Administer dose after HD on dialysis day]
		If Original dose: **2 gm IV q4h** — 30-50	2 gm IV q6h
		If Original dose: **2 gm IV q4h** — 15-29	2 gm IV q8h
		If Original dose: **2 gm IV q4h** — <15 or HD	2 gm IV q12h [Administer dose after HD on dialysis day]
	PO dose: • 250 - 500 mg PO q6h	N/A	No dosage adjustment required.

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Ampicillin/ Sulbactam (Unasyn)	**IV Dose:** **Usual dose:** • 3 gm IV q6-8h* **3 gm IV q6h is preferred for serious infections or treatment of gram-negative infections*	≥ 30	3 gm IV q6-8h
		15-29	3 gm IV q12h
		< 15 or HD	3 gm IV q24h [Administer dose after HD on dialysis day]
	IV Dose: **Mild infections by Carbapenem Resistant *Acinetobacter baumannii* (CRAB) susceptible to Unasyn:** • 3 gm IV q4-6h	> 50	3 gm IV q4-6h
		30-50	3 gm IV q6h
		15-29	3 gm IV q8h
		<15 or HD	3 gm IV q12h [Administer dose after HD on dialysis day]
	IV Dose (High dose Unasyn for MRO *Acinetobacter baumannii*) **Unasyn resistant or moderate-severe MRO Acinetobacter baumannii infection*:** • 9 gm IV q8h over 4 hours** ** For Unasyn resistant or moderate-severe Acinetobacter infection, combination therapy is required –* *Refer to MoCHIs – Drug Resistant GNR Treatment Algorithm for more info.* *** Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients*	> 50	9 gm IV q8h
		20-50	6 gm IV q8h
		<20 or HD	6 gm IV q12h [Administer dose after HD on dialysis day]
	PO Dose: **Usual dose:** • 375 - 750 mg PO q12h	<30	No data on renal dose adjustment. Consider using normal dose* **HSgB Nephrologists' consensus based on expert opinion.*

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		CrCl (mL/min)*	ADJUSTED DOSE
Attention! There are **3 types** of **Amphotericin B** available in HSgB as listed below. Please ensure that reference is made to the correct Amphotericin B. 1. **Amphotericin B Deoxycholate** 2. **Amphotericin B Lipid Complex (ABLC)** 3. **Amphotericin B Liposomal**			
Amphotericin B Deoxycholate	**Amphotericin B DEOXYCHOLATE** **Usual dose:** • 0.7 – 1.0 mg/kg IV q24h **Dosing for Opportunistic Infections:** **1. Penicilliosis:** • 0.6 - 0.7 mg/kg IV q24h **2. Histoplasmosis** • 0.7 - 1.0 mg/kg IV q24h **3. Cryptococcal Meningitis:** • 0.7 - 1.0 mg/kg IV q24h	N/A	No dosage adjustment necessary; consider alternative antifungals if renal insufficiency occurs during therapy despite adequate hydration. ***Caution!*** *Amphotericin B commonly causes adverse reactions, including nephrotoxicity, electrolyte imbalances (K^+ and Mg^+) and infusion-related reactions. These can be prevented through proper hydration, electrolyte supplements and pre-medications. Refer to the HSgB Amphotericin B Protocol for guidance.*
Amphotericin B Lipid Complex (ABLC)	**Amphotericin B LIPID COMPLEX (ABLC)** **Usual dose:** • 5 mg/kg IV q24h		
Amphotericin B Liposomal	**Amphotericin B LIPOSOMAL** **Only for the Treatment of Cryptococcal Meningitis in RVD Patients:** • 10 mg/kg IV x 1 dose		
Anidulafungin	**Treatment of invasive candidiasis:** • 200 mg IV x 1 (Loading dose), then 100 mg IV q24h	N/A	No dosage adjustment required
Artemether/ Lumefantrine (Riamet)	**Usual regimen:** A 3-day treatment schedule with a total of 6 doses: Initial dose at the time of diagnosis (0 hour), followed by the 2nd dose 8 hours later, then 1 dose BD for the following 2 days. Dose is based on bodyweight as below: • 5 - 14 kg: 1 tablet per dose • 15 - 24 kg: 2 tablets per dose • 25 - 34 kg: 3 tablets per dose • ≥ 35kg: 4 tablets per dose	N/A	No data on renal dose adjustment. Use with caution.

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		CrCl (mL/min)*	ADJUSTED DOSE
Artesunate	**Treatment of malaria:** • 2.4 mg/kg IV at 0 hour, 12 hours and 24 hours, then once daily subsequently until patient can tolerate orally and oral therapy can be substituted	N/A	No dosage adjustment required
Atazanavir (ATV) (Reyataz)	**Treatment of HIV Infection in combination with other ART:** • 300 mg PO q24h* ** In combination with **Ritonavir (RTV)** (Norvir) 100 mg PO q24h*	N/A	No dosage adjustment required.
Azithromycin (Zithromax)	250 - 500 mg IV or PO q24h	N/A	No dosage adjustment required.
Aztreonam	**Treatment of CRE*:** • 2 gm IV q8h ** In combination with **Ceftazidime/ Avibactam (Avycaz/ Zavicefta)** # Aztreonam & Ceftazidime/Avibactam need to be administered simultaneously. To administer simultaneously in combination therapy: May use Y-site infusion set.*	16-30	2 gm IV q12h* **HSgB's consensus based on expert opinion – to match Ceftazidime/Avibactam administration time.*
		< 15 or HD	2 gm IV q24h* **HSgB's consensus based on expert opinion – to match Ceftazidime/Avibactam administration time.*
Cefazolin	**UTI or mild SSTI:** • 1 gm IV q8h **Moderate-severe SSTI, Abscesses, Open fractures, thrombophlebitis, MSSA bacteraemia* or endocarditis:** • 2 gm IV q8h (usual dose) **Refer to MoCHIs – Staphylococcus aureus bacteraemia (SAB) algorithm* **Obese patients/severe infections:** • 2 gm IV q6h (max dose)	10-50	1-2 gm IV q12h
		< 10	1-2 gm IV q24h
		HD	**In-patients:** 2 gm stat, then 1 gm IV q24h [Administer dose after HD on dialysis day] **Out-patients:** 2 gm / 2 gm / 3 gm IV post-dialysis

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		CrCl (mL/min)*		ADJUSTED DOSE
Cefepime	**Mild to moderate infections,** or **Urinary Tract Infection (UTI):** • 1 gm IV q8-12h	If Original dose: **1 gm IV q8-12h**	30-60	1 gm IV q12h
			10-29	1 gm IV q24h
	Diabetic foot infection (DFU), or **Intra-abdominal infection (IAI),** or **Osteomyelitis (OM),** or **Prosthetic joint infection (PJI),** or **Skin & Soft Tissue Infection (SSTI):** • 2 gm IV q8-12h*		< 10	500 mg IV q24h
			HD	1 gm once, then 500mg IV q24h [Administer dose after HD on dialysis day]
	Bacteraemia, or **Pneumonia,** or **Sepsis or Severe infections,** or **Suspected/confirmed Pseudomonas infection,** or **CNS infections,** or **Febrile neutropenia,** or **Cystic fibrosis,** or **Obese patients:** • 2 gm IV q8h*	If Original dose: **2 gm IV q12h**	30-60	1 gm IV q12h ***or*** 2 gm IV q24h
			10-29	1 gm IV q24h
	** Consider extended infusion.* *Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients*		< 10	500 mg IV q24h
	Treatment of AmpC-E (CEK or SPM) Infections:** ○ **CEK** - *Citrobacter freundii, Enterobacter cloacae, Klebsiella aerogenes* ○ **SPM** - *Serratia marcescens, Providencia spp, Morganella morganii*		HD	1 gm once, then 500mg IV q24h [Administer dose after HD on dialysis day]
	1. Uncomplicated Cystitis: • 1 gm IV q8h **2. All other infections:** • 2 gm IV q8h, infused over 3 hours	If Original dose: **2 gm IV q8h**	30-60	1 gm IV q8h ***or*** 2 gm IV q12h
			10-29	1 gm IV q12h ***or*** 2 gm IV q24h
	*** Refer to MoCHIs – Drug Resistant GNR Treatment Algorithm for more info.*		< 10 or HD	1 gm q24h [Administer dose after HD on dialysis day]

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		CrCl (mL/min)*	ADJUSTED DOSE
Cefoperazone (Cefobid)	1-2 gm IV q12h	N/A	No adjustment required. [Administer dose after HD on dialysis day due to some drug removal during HD]
Cefoperazone/ Sulbactam (Sulperazone)	**Empirical cover for GNR Infections or Melioidosis*:** *(if not suspicious of ESBL or Acinetobacter)* • 2 gm IV q6h ***Not recommended for patients with coagulation problem / thrombocytopenia**	< 30 or HD	1 gm IV q6h
	MRO Acinetobacter*: • 4 gm IV q6h (= Sulbactam 8 gm/day) ***Not recommended for patients with coagulation problem / thrombocytopenia**	30-50	3 gm IV q6h (Sulbactam 6 gm/day)
		< 30 or HD	2 gm IV q6h (Sulbactam 4 gm/day)
Cefotaxime	2 gm IV q8h	10-50	2 gm IV q12h
		< 10 or HD	2 gm IV q24h [Administer dose after HD on dialysis day]
Ceftaroline (Zinforo)	**Usual dose:** 600 mg IV q12h ***Consider 600 mg IV q8h for severe infections and endocarditis.***	30-50	400 mg IV q12h
		15-29	300 mg IV q12h
		<15 or HD	200 mg IV q12h [Administer dose after HD on dialysis day]

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		CrCl (mL/min)*		ADJUSTED DOSE
Ceftazidime (Fortum)	**Usual dose:** • 2 gm IV q8h * **Cystic Fibrosis:** • 2 gm IV q6-8h * (Max dose: 8 gm / day) ** Consider extended infusion. Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients*	If Original dose: **2 gm IV q8h**	30-50	2 gm IV q12h
			10-29	2 gm IV q24h
			< 10	1 gm IV q24h
			HD	**In-patients:** 1 gm IV q24h ***or*** 2 gm IV q48h **Out-patients:** 2 gm / 2 gm / 3 gm IV post-dialysis
		If Original dose: **2 gm IV q6h**	31-50	2 gm IV q8h
			15-30	2 gm IV q12h
			< 15 or HD	2 gm IV q24h [Administer dose after HD on dialysis day]
	Melioidosis (*Burkholderia pseudomallei*) **Intensive Therapy:** • 100-120 mg/kg/day IV, divided q6-8h * ** Usual dose: 2 gm IV q6-8h Max dose: 8 gm per day* *Consider extended infusion. Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients*	31-50		**≤ 60 kg:** 1 gm IV q8h **> 60 kg:** 2 gm IV q8h
		15-30		**≤ 60 kg:** 1 gm IV q12h **> 60 kg:** 2 gm IV q12h
		< 15 or HD		**≤ 60 kg:** 1 gm IV q24h **> 60 kg:** 2 gm IV q24h [Administer dose after HD on dialysis day]
		CRRT		2 gm IV q12h

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		CrCl (mL/min)*	ADJUSTED DOSE
Ceftazidime/ Avibactam (Avycaz/ Zavicefta)	**Treatment of CRE (monotherapy or in combination with Aztreonam*)** • 2.5 gm (=2000 mg/500 mg) IV q8h **** Ceftazidime/Avibactam & Aztreonam need to be administered simultaneously. Both drugs are Y-site compatible.***	31 - 50	1.25 gm (= 1000 mg/250 mg) IV q8h
		16 - 30	0.94 gm (= 750 mg/187.5 mg) IV q12h
		6 - 15	0.94 gm (= 750 mg/187.5 mg) IV q24h
		< 5 or HD	0.94 gm (= 750 mg/187.5 mg) IV q48h [Administer dose after HD on dialysis day as the drug is haemodialyzable]
Ceftolozane/ Tazobactam (Zerbaxa)	**Complicated intra-abdominal infections (cIAI) or Complicated urinary tract infections (cUTI):** • 1.5 gm IV q8h	30-50	750 mg IV q8h
		15-29	375 mg IV q8h
		< 15 or HD	Load with 750 mg IV, then give 150 mg IV q8h [Dose after HD on dialysis days]
	Hospital-acquired or ventilator-associated pneumonia (HAP/VAP): • 3 gm IV q8h	30-50	1.5 gm IV q8h
		15-29	750 mg IV q8h
		< 15 or HD	Load with 2.25 gm IV, then give 450 mg IV q8h [Dose after HD on dialysis days]
Ceftriaxone (Rocephine)	**Usual dose:** • 1-2 gm IV q24h **Critically ill / Hypoalbuminemia:** • 1 gm IV q8-12h **CNS Infections:** • 2 gm IV q12h *(Max dose: 4 gm/day)* **Typhoid fever (*Salmonella thyphi*):** • 50-75 mg/kg/day (2-4 gm/day, in 1-2 divided doses) *(Max dose: 4 gm/day)*	N/A	No dosage adjustment required.

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Cefuroxime (Zinnat [PO] / Zinacef [IV])	**IV dose:** **Uncomplicated UTI, Mild SSTI:** • 750 mg IV q8h **Bone & Joint Infections, Moderate-Severe Infections:** • 1,500mg IV q8h ***May go up to 1,500 mg IV q6h for life-threatening infections & in obese patients.***	10-20	100% of normal dose IV q12h
		< 10 or HD	100% of normal dose IV q24h [On dialysis days, administer dose after HD]
	PO Dose: **Usual dose:** • 500 mg PO q12h **Uncomplicated UTI:** • 250-500 mg PO q12h	< 30 or HD	100% of normal dose PO q12h* [On dialysis days, administer dose after HD] ****HSgB Nephrologists' consensus based on expert opinion.***
Cephalexin	**PO Dose:** **Usual dose:** • 500 mg PO q6h or • 1000 mg PO q12h **Uncomplicated cystitis:** • 500 mg PO q12h **Severe/Deep-seated infections:** • May go up to 1000 mg PO q6h *(Max dose)*	10-30	250 - 500 mg PO q8-12h
		<10 or HD	250 - 500 mg PO q12h [On dialysis days, administer dose after HD]
Ciprofloxacin	**IV dose:** 400 mg IV q8-12h* ****Higher dose (400 mg IV q8h) is recommended for the treatment of Pseudomonas Infection, CNS infection or Resistant Gram-Negative Infections***	30–50	400 mg IV q12h
		<30	400 mg IV q24h
		HD or PD	200 – 400 mg IV q24h [On dialysis days, administer dose after HD]
	PO dose: 500 – 750 mg PO q12h	30–50	500 – 750 mg PO q12h
		<30	250 – 500 mg PO q24h
		HD or PD	250 – 500 mg PO q24h [On dialysis days, administer dose after HD]

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		CrCl (mL/min)*		ADJUSTED DOSE
Clarithromycin	**Usual dose:** • 500 mg PO q12h* **If used concurrently with HIV Protease Inhibitors (HIV PIs), further dose reduction is required in renal insufficiency* **H. pylori eradication therapy:** • 500 mg PO q12h** *** In combination with **Amoxicillin** & Proton Pump Inhibitor (PPI)*	Without HIV PIs	30–60	Usual dose
			<30 or HD	250 mg PO q12h ***or*** 500 mg PO q24h
		Used with HIV PIs	30–60	250 mg PO q12h ***or*** 500 mg PO q24h
			<30 or HD	250 mg PO q24h (or consider using ***Azithromycin*** *(Zithromax)* as alternative)
Clindamycin	**IV dose:** **Usual dose:** • 600mg IV q6-8h ***or*** • 900 mg IV q8h	N/A		No dosage adjustment required
	PO dose: **Usual dose:** 300 - 600 mg PO q6-8h			
	Oral Option for Low risk MSSA Bacteraemia ***(Must fulfill ALL of the criteria below):*** ○ Completed 5-7 days of IV therapy ○ Culture clearance after 24-96H ○ No sign/symptoms of metastatic infection ○ No non-removable foreign devices ○ No prosthetic heart graft/valve ○ No severe comorbidities **** This regimen must be discussed with ID Specialist or Consultant*** **PO dose:** **Usual dose:** • 600 mg PO q8h *Ref: Efficacy and safety of an early oral switch in low-risk S. aureus bloodstream infection (SABATO) trial. AJ Kaasch et al. The Lancet, 2024.*			

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		CrCl (mL/min)*	ADJUSTED DOSE
Cloxacillin	**IV dose:** **Usual dose:** • 2 gm IV q4-6h **MSSA Bacteraemia* / Endocarditis / CNS Infections / Obese patients:** • 2 gm IV q4h **Refer to MoCHIs – Staphylococcus aureus bacteraemia (SAB) algorithm* **Cellulitis or other soft tissue infection (SSTI):** • 1 - 2 gm IV q4-6h **PO dose:** • 250 - 1,000 mg PO q6h (Usual dose: 500 mg PO q6h) ** May increase dose for serious infections (max dose: 6,000 mg/day)*	N/A	No dosage adjustment required
Colistin (Polymyxin E) *** Caution!** There are 2 types of Polymyxins available in HSgB; Colistin (Polymyxin E) & **Polymyxin B**. Please ensure that reference is made to the right Polymyxin.	**Loading dose:** *(independent of renal function):* • 9 million units IV (Usual dose) *or* Weight based (AdjBW): • >75 kg: 9 million units IV • 61-74 kg: 8 million units IV • 51-60 kg: 7 million units IV • < 50 kg: 6 million units IV **Maintenance Dose:** *(to administer 12-24h after loading dose):* • 4.5 million units IV q12h **Please refer to Polymyxin Dosing Guide [click here] for full dosing guide including dilution & administration.*	50-59	4 million units IV q12h
		40-49	3.5 million units IV q12h
		30-39	3 million units IV q12h
		10-29	2.5 million units IV q12h
		<10	2 million units IV q12h
		HD	**Dose on non-dialysis days:** 2 million units IV q12h **Dose on dialysis days:** 2 million units IV q12h plus supplemental dose post-HD ○ 1.2 million units IV (if 3-hours HD session) ***or*** ○ 1.6 million units IV (if 4-hours HD session) *Supplemental dose can be served together with the next regular dose.*
		CRRT	6.7 million units IV q12h

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		CrCl (mL/min)*	ADJUSTED DOSE
Cycloserine	10 – 15 mg/kg/day PO in 2 divided doses ***(maximum 1,000 mg/day; start at 250 mg once daily and increase dose per tolerability)***	≥50	Usual dose
		30-49	250 - 500 mg PO q12-24h [Dosing interval poorly defined]
		<30	250 mg PO daily
		< 10 (not on HD)	**Not recommended** *(unless patient is receiving HD)*
		HD	250 mg PO q24h ***or*** 500 mg PO three times per week.
Daclatasvir	**Hep C Treatment in patients co-infected with HIV*:** **With ATV+RTV:** • 30 mg PO q24h **With other RTV boosted PIs:** • 60 mg PO q24h **With DTG or RAL:** • 60 mg PO q24h **With EFV or NVP:** • 90 mg PO q24h **** In combination with Sofosbuvir.***	N/A	No dosage adjustment required.
Dapsone	**PCP Prophylaxis:** • 100 mg PO q24h	<10 or HD	No data on renal dose adjustments, metabolite excreted renally. Use with caution.
Darunavir (DRV) (Prezista)	**Ritonavir-boosted DRV dose*:** • 600 mg PO q12h **** With Ritonavir 100 mg PO q12h***	N/A	No dosage adjustment required.

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		CrCl (mL/min)*	ADJUSTED DOSE
Diethylcarbamazine (DEC)	**Treatment of Lymphatic Filariasis*:** • 6 mg/kg/day (may be given as a single dose or in 3 divided doses) ***For 12 doses treatment regimen, Albendazole 400 mg is given with DEC on Day 1, followed by DEC only for Day 2-11***	<50	Consider dose reduction (No specific adjustment is provided)
Dolutegravir (DTG) (Tivicay)	**Usual dose:** • 50 mg PO q24h **Second line treatment in INSTI-experienced patients with suspected/confirmed INSTI-associated resistance:** • 50 mg PO q12h **Co-administration with Rifampicin:** • 50 mg PO q12h **Switching from EFV to DTG in a patient with unsupressed viral load*:** • 50 mg PO q12h for 2 weeks, then 50 mg PO q24h *** HSgB Consensus based on expert opinion***	N/A	No dosage adjustment required
Doxycycline	200 mg stat, then 100 mg PO q12h	N/A	No dosage adjustment required
Efavirenz (EFV) (Stocrin)	**Usual dose:** • 600 mg PO ON **Reduced dose for patients with CNS side effects:** • 400 mg PO ON	N/A	No dosage adjustment required

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		CrCl (mL/min)*	ADJUSTED DOSE
Ertapenem	**Usual dose:** • 1 gm IV/IM q24h* **Ertapenem is not recommended for patients with critical-illness/ haemodynamic instability/ hypoalbuminemia (Alb < 25) ➔ Alternative Carbapenem should be considered.* **Hypoalbuminemia:** • 1 gm IV q12h** ***This regimen is not recommended due to high cost. Consider using a more cost-effective alternative, such as IV Meropenem.*	<30 or HD	500 mg IV/IM q24h [On dialysis days, administer dose after HD]
Erythromycin	**IV Dose (Erythromycin Lactobionate):** 250-500 mg IV q6h **Oral dose (EES):** 400-800 mg PO q6-12h	N/A	No dosage adjustment required
Ethambutol (EMB)	***Mycobacterium avium* complex (MAC) Treatment:** • 15 mg/kg PO q24h* ***Mycobacterium tuberculosis* (MTB) Treatment:** • 15–20 mg/kg PO q24h* **Round up to the nearest 200 mg*	<30 or HD	Usual dose PO q48h ***or*** three times weekly [For patients on HD, administer dose after dialysis]
Ethionamide	15–20 mg/kg/day PO in 1-3 divided doses* **Usually 250 – 500 mg PO once or twice daily*	<30 or HD	250–500 mg PO q24h

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		CrCl (mL/min)*	ADJUSTED DOSE
Favipiravir	**COVID-19:** • Loading dose: 1800 mg PO q12h x 1 day, then • Maintenance dose: 800 mg PO q12h x 4 days (Total duration: 5 days).	< 50	No data on dose adjustment, may use normal dose with caution.
		< 30 & not on HD	to consult ID Specialist/Consultant
		ESRF on Intermittent HD	May use normal dose with caution.
	Influenza: • Loading dose: 1600 mg PO q12h x 1 day, then • Maintenance dose: 600 mg PO q12h x 4 days (Total duration: 5 days)	< 50	Consider using ***Oseltamivir*** *(Tamiflu)*
Fluconazole	**Dose range:** 100–1,200 mg/day, PO or IV *(Dose and route of administration depends on the type of infection & phase of treatment*)* **Oropharyngeal Candidiasis (Oral thrush):** • Fluconazole 100 mg PO q24h **Oesophageal Candidiasis:** • Fluconazole 200 - 400 mg/day, PO or IV **Invasive Candidemia:** • 800 mg IV LD, followed by 400 mg IV q24h **Refer to HSgB Antibiotic Guideline for dosing regimen for Opportunistic Infections in HIV pts*	≤50	50% of dose IV or PO q24h
		HD	50% of dose IV or PO q24h [On dialysis days, administer dose after HD] ***or*** 100% of dose IV or PO post-HD on dialysis days only
Flucytosine	**Cryptococcal Meningitis Treatment*:** • 25 mg/kg PO q6h **In combination with Amphotericin B or Fluconazole*	21–40	25 mg/kg PO q12h
		10–20	25 mg/kg PO q24h
		<10	25 mg/kg PO q48h
		HD	25–50 mg/kg PO q48-72h [On dialysis days, administer dose after HD]

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		CrCl (mL/min)*	ADJUSTED DOSE
Fosfomycin	**Uncomplicated UTI*:** • 3 gm PO x 1 dose	N/A	No dosage adjustment required.
	Complicated UTI*: • 3 gm PO every 2-3 days x 3 doses ** Fosfomycin is only recommended for the treatment of E. coli cystitis (Fosfomycin does not achieve adequate concentrations in the renal parenchyma/serum, thus should be avoided for pyelonephritis/systemic infection)*	10-50	Limited data. Consider 3 gm PO every 3 days
		<10	No data, given prolonged half-life consider dose adjustment or avoid due to decreased urinary excretion
		HD	Re-dose after dialysis due to removal during HD
Fusidic Acid	**Usual dose*:** • 500 mg PO q8h ** Fusidic Acid should NOT be used as monotherapy. For MRSA, Fusidic Acid is used in combination therapy with Rifampicin (RIF)*	N/A	No dosage adjustment required. Fusidic acid is cleared by the liver.
Ganciclovir	**CMV Induction Therapy:** • 5 mg/kg IV q12h	50–69	2.5 mg/kg IV q12h
		25–49	2.5 mg/kg IV q24h
		10–24	1.25 mg/kg IV q24h
		<10 or HD	1.25 mg/kg IV three times per week [On dialysis days, administer dose after HD]
	CMV Maintenance Therapy: • 5 mg/kg IV q24h	50–69	2.5 mg/kg IV q24h
		25–49	1.25 mg/kg IV q24h
		10–24	0.625 mg/kg IV q24h
		<10 or HD	0.625 mg/kg IV three times per week [On dialysis days, administer dose after HD]

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		CrCl (mL/min)*		ADJUSTED DOSE
Gentamicin		**Adjust dose based on serum concentrations. Target levels:**		
		SDD: Trough: <1 mg/L (< 2.1 µmol/L) Peak: 10-30 mg/L (21-63 µmol/L)	**MDD:** Trough: <2 mg/L(< 4.2 µmol/L) Peak: 5-10 mg/L (10.5-21 µmol/L)	**Synergistic Dosing:** Trough: <1 mg/L (< 2.1 µmol/L) Peak: 3-5 mg/L (6.3-10.5µmol/L)
	Single Daily Dosing (SDD): • 5-7 mg/kg IV q24h ***or*** • 7 mg/kg IV q24h (*if critically ill*)	**Single Daily Dosing (SDD)**	60-80	4 mg/kg IV q24h
			40-60	3.5 mg/kg IV q24h
			30-40	2.5 mg/kg IV q24h
			< 30	**Refer to Gentamicin MDD**
	Multiple Daily Dosing (MDD): • LD: 2 mg/kg • MD: 1.5 - 2 mg/kg IV q8h	**Multiple Daily Dosing (MDD)**	40 - 60	1.5 – 2 mg/kg IV q12h
			20 - 40	1.5 – 2 mg/kg IV q24h
			< 20	1.5 – 2 mg/kg IV q48 – 72h
	Synergistic Dosing: (*for infective endocarditis*) • 3 mg/kg IV q24h ***or*** • 1 mg/kg IV q8h		HD	Loading dose 2 - 3 mg/kg, followed by 1 - 2 mg/kg IV q48-72h Re-dose when level: • < 2 mg/L (< 4.2 µmol/L)] for UTI, • 3-5 mg/L (< 6.3-10.5 µmol/L) for gram negative infection. [On dialysis days, administer dose after HD]
	[Click here to refer to body weight to be used for Aminoglycosides]	**Synergistic Dosing**	40-60	1 mg/kg IV q12h
			20-40	1 mg/kg IV q24h
			< 20	1 mg/kg IV load Re-dose when level< 1 mg/L (< 2.1 µmol/L)
			HD	1 mg/kg IV q48-72h Re-dose when level< 1 mg/L (< 2.1 µmol/L) [On dialysis days, administer dose after HD]

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		CrCl (mL/min)*		ADJUSTED DOSE
Griseofulvin	**Usual dose:** • 125 - 250 mg PO q6h* **HSgB stock: Microsize 125 mg Tab (Microsize 250 mg = Ultramicrosize 125 mg)*	N/A		No dosage adjustment required
Imipenem/ Cilastatin	**Usual dose:** • 500 mg IV q6h* **High dose for severe infections or for bacterial species with intermediate susceptibility:** • 1,000 mg IV q6-8h* ** Consider extended infusion. Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients*	If Original dose: **500 mg IV q6h**	30-59	500 mg IV q8h
			15-29	250 mg IV q6h *or* 500 mg IV q12h
			<15	Not recommended, unless HD is instituted within 48h
			HD	250 mg IV q6h *or* 500 mg IV q12h [On dialysis days, administer dose after HD]
		If Original dose: **1,000 mg IV q8h**	60-90	500 mg IV q6h
			30-59	500 mg IV q8h
			15-29	500 mg IV q12h
			< 15	Not recommended, unless HD is instituted within 48h
			HD	250 mg IV q6h *or* 500 mg IV q12h [On dialysis days, administer dose after HD]
		If Original dose: **1,000 mg IV q6h**	60-90	750 mg IV q8h
			30-59	500 mg IV q6h
			15-29	500 mg IV q12h
			< 15	Not recommended, unless HD is instituted within 48h
			HD	500 mg IV q12h [On dialysis days, administer dose after HD]

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		CrCl (mL/min)*	ADJUSTED DOSE
Isoniazid (INH)	5 mg/kg IV or PO q24h * (max: 300 mg/day) **Round up the dose to the nearest 50 mg*	N/A	No adjustment required
Itraconazole	**Usual dose:** • 100 - 200 mg PO q12h **Consolidation therapy for cryptococcal meningitis/ histoplasmosis/ penicilliosis:** • 200 mg PO q8h for 3 days, followed by 200 mg PO q12h **Maintenance therapy / secondary prophylaxis for cryptococcal meningitis / histoplasmosis/ penicilliosis:** • 200 mg PO q24h **Treatment of Oropharyngeal candidiasis (oral thrush) / Oesophageal candidiasis:** • 200 mg PO q24h **Pulse regimen for Onychomycoses:** • 200 mg PO q12h x 1 week per month	<10	50% of normal dose PO q12h
		HD	100 mg PO q12-24h [No significant itraconazole removal during HD]
Ivermectin	**Scabies:** • 200 mcg/kg stat **Norwegian scabies:** • 200 mcg/kg stat on Day 1, Day 2, Day 8, Day 9 & Day 15 **Treatment of strongyloidiasis (Strongyloides stercoralis):** • 200 mcg/kg/day for 1-2 days **Strongyloides hyperinfection:** • 200 mcg/kg/day for 14-21 days	N/A	No data on renal dose adjustments. Use with caution.

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		CrCl (mL/min)*	ADJUSTED DOSE
Kanamycin	**MDR-TB Treatment:** 15 mg/kg IM or IV q24h (max: 1 gm/day) **TDM Kanamycin is not available in HSgB*	<30	15 mg/kg IV q48-72h (2-3 times per week)
		HD	7.5 - 15 mg/kg IV post-dialysis
Lamivudine (3TC)	300 mg PO q24h (preferred) ***or*** 150 mg PO q12h	<50	150 mg PO q24h
		<15 or HD	150 mg PO once, then 75 mg PO q24h [On dialysis days, administer dose after HD, with strict monitoring]
Levofloxacin	**Low dose:** • 500 mg IV or PO q24h	20–49	500 mg once, then 250 mg q24h, IV or PO ***or*** 500 mg q48h, IV or PO
		<20 or HD	500 mg once, then 250 mg q48h, IV or PO [On dialysis days, administer dose after HD]
	High dose: • 750 - 1,000 mg IV or PO q24h	20–49	750 mg q48h, IV or PO
		<20 or HD	750 mg once, then 500 mg q48h, IV or PO [On dialysis days, administer dose after HD]
Linezolid (Zyvox)	**Usual dose:** 600 mg IV or PO q12h	N/A	No dosage adjustment required [On dialysis days, administer dose after HD]
Lopinavir / Ritonavir (LPV/RTV) (Kaletra)	**Usual dose:** • LPV 400 mg/ RTV 100 mg (= 2 tablets) PO q12h **Co-administration with Efavirenz:** • LPV 600 mg/ RTV 150 mg (= 3 tablets) PO q12h	N/A	No dosage adjustment required [On dialysis days, administer dose after HD]

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY		
		CrCl (mL/min)*		ADJUSTED DOSE
Meropenem	**Usual dose:** • 1 gm IV q8h	30-50		1 gm IV q12h
		10-29		500 mg IV q12h
		<10 or HD		500 mg IV q24h [On dialysis days, administer dose after HD]
	Severe infections or CNS infections: • 2 gm IV q8h* ** Consider extended infusion.* *Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients*	30-50		1 gm IV q8h ***or*** 2 gm IV q12h
		10-29		1 gm IV q12h
		<10 or HD		1 gm IV q24h [On dialysis days, administer dose after HD]
	Resistant Gram-Negative Infections (ESBL-E, AmpC-E, CRE or CRAB):** **1. Uncomplcated Cystitis:** • 1 gm IV q8h **2. All other ESBL-E or AmpC-E infections:** • 1 – 2 gm IV q8h **3. All other CRE or CRAB infections:** • 2 gm IV q8h, infused over 3 hours *** Refer to MoCHIs – Drug Resistant GNR Treatment Algorithm for more info.*	If original dose: **1 gm IV q8h**	30-50	1 gm IV q12h
			10-29	500 mg IV q12h
			<10 or HD	500 mg IV q24h [On dialysis days, administer dose after HD]
		If original dose: **2 gm IV q8h**	30-50	1 gm IV q8h ***or*** 2 gm IV q12h
			10-29	1 gm IV q12h
			<10 or HD	1 gm IV q24h [On dialysis days, administer dose after HD]
	Melioidosis (*Burkholderia pseudomallei*): **Intensive therapy for severe melioidosis or neuromelioidosis:** • 75 mg/kg/day IV divided q8h (Usual dose: 1 gm IV q8h. If neurologic: 2 gm IV q8h)	30-50		1 gm IV q12h **Neuromelioidosis:** 1 gm IV q8h ***or*** 2 gm IV q12h
		15-29		1 gm IV q12h
		<15 or HD		1 gm IV q24h [On dialysis days, administer dose after HD]
		CAPD		As per < 15 ml/min
		CRRT		1 gm IV q8h

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		CrCl (mL/min)*	ADJUSTED DOSE
Metronidazole (Flagyl)	**Usual dose:** • 500 mg IV q8h ***or*** • 400 mg PO q8h **H. pylori infection, Non-gonococcal urethritis (NGU), Pelvic inflammatory disease (PID) or Bacterial vaginosis:** • 400 mg PO q12h ***Entamoeba histolytica* (Amoebiasis) liver abscess:** • 750 mg IV q8h ***or*** • 800 mg PO q8h	N/A	No dosage adjustment required
Micafungin	**Invasive candidiasis:** • 100 mg IV q24h ** Consider 150 mg IV q24h for endocarditis*	N/A	No dosage adjustment required
Minocycline	**Treatment of *Acinetobacter baumannii or Stenotrophomonas maltophilia* infections *:** • 200 mg IV or PO q12h *** Refer to MoCHIs – Drug Resistant GNR Treatment Algorithm for more info.*	N/A	Use normal dose with caution*. * Dose >200 mg/day may increase plasma urea concentrations. - Patients with renal impairment should be monitored for elevated BUN, serum creatinine, and/or signs of uraemia.
Molnupiravir	**COVID-19 Category 2 or 3:** *(within 5 days of symptom onset)* • 800 mg PO q12h for 5 days	N/A	No dosage adjustment required
Moxifloxacin	**Usual dose:** • 400 mg IV or PO q24h	N/A	No dosage adjustment required

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		CrCl (mL/min)*	ADJUSTED DOSE
Nevirapine	**Usual dose:** • 200 mg PO q24h for the first 2 weeks (lead-in dosing), Followed by 200 mg PO q12h **Simplified regimen for patients with consistently suppressed viral load:** • 400 mg PO q24h	N/A	No dosage adjustment required
Nirmatrelvir/ Ritonavir (Paxlovid)	**COVID-19 Category 2 or 3:** *(within 5 days of symptom onset)* • 300 mg Nirmatrelvir / 100 mg Ritonavir PO q12h (eHIS order: 3 tabs BD x 5 days)	≥ 60	300 mg Nirmatrelvir / 100 mg Ritonavir PO q12h (eHIS order: 3 tabs BD x 5 days)
		30-60	150 mg Nirmatrelvir / 100 mg Ritonavir PO q12h (eHIS order: 2 tabs BD x 5 days)
		<30	Use not recommended
		Dosing for Advanced CKD (Must be discussed with & approved by ID Consultant)	
		eGFR < 30 ml/min, not on dialysis:	Nirmatrelvir 300 mg + Ritonavir 100 mg on Day 1, then Nirmatrelvir 150 mg + Ritonavir 100 mg on Day 2-5 (eHIS order: 3 tabs OD x 1/7, then 2 tabs OD x 4/7)
		eGFR < 30 ml/min, on dialysis & weight ≥ 40 kg:	Nirmatrelvir 300 mg + Ritonavir 100 mg on Day 1, then Nirmatrelvir 150 mg + Ritonavir 100 mg on Day 2-5, serve after HD on dialysis days (eHIS order: 3 tabs OD x 1/7, then 2 tabs OD x 4/7)
		eGFR < 30 ml/min, on dialysis & weight < 40 kg:	Nirmatrelvir 150 mg + Ritonavir 100 mg on Day 1, then Nirmatrelvir 150 mg + Ritonavir 100 mg EOD x 2 doses, serve after HD on dialysis days (eHIS order: 2 tabs OD x 1/7, then 2 tabs q48h x 4/7)

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		CrCl (mL/min)*	ADJUSTED DOSE
Nitrofurantoin	**Uncomplicated Urinary Tract Infection (UTI)* - Treatment:** ** Do not use for pyelonephritis or urosepsis due to inadequate serum & renal parenchymal drug concentrations.* **Tab. Nitrofurantoin Immediate-release:** • 50 - 100 mg PO q6h **Tab. Nitrofurantoin Sustained-release (SR) or dual-release (monohydrate + macrocrystal) formulation:** • 100 mg PO q12h	30-60	Use normal dose with caution
		< 30	Avoid use*** **** Recent data shows there is an increased risk for pulmonary toxicity in patients with CrCl ≤ 30 ml/min.*
Nystatin	**Oral thrush (Oropharyngeal candidiasis):** • 500,000 units (5 mL) PO q6h* **Administration:* *Swish & swallow (Put 1/2 of dose in left side of mouth & retain in mouth for 3-5 minutes before swallowing. Repeat for right side of mouth)*	N/A	No dosage adjustment required
Oseltamivir (Tamiflu)	**Influenza Treatment:** 75 mg PO q12h	30-60	75 mg PO q24h
		10-30	75 mg PO q48h
		<10 or HD	75 mg PO q48h* **HSgB Nephrologists' consensus based on expert opinion*
		CAPD	75 mg PO as a single stat dose
	Influenza Prophylaxis: 75 mg PO q24h	30-60	75 mg PO q48h
		10-30	30 mg PO q48h
		<10 or HD	30 mg every other HD session

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY		
		CrCl (mL/min)*		ADJUSTED DOSE
Paromomycin	**Intestinal amebiasis (*Entamoeba histolytica*):** • 25-35 mg/kg/day PO in 3 divided doses	<10		Minimal systemic absorption. No dosage adjustment necessary but monitor for worsening renal function and ototoxicity in patients with ESRD.
Penicillin G Benzathine (Benzathine Penicillin)	**Primary, Secondary or Early-latent Syphilis:** • 2.4 million units IM single dose **Late Latent Syphilis, Gummatous Syphilis or Cardiovascular Syphilis:** • 2.4 million units IM weekly for 3 weeks (Day 1, 8 & 15)	N/A		No data on renal dose adjustments. Use with caution.
Penicillin G Procaine (Procaine Penicillin)	**Late Latent Syphilis, Gummatous Syphilis or Cardiovascular Syphilis** • 600,000 units IM q24h **Neurosyphilis, Ocular Syphilis, or Otosyphilis:** • 2.4 million units IM q24h *(with probenecid)*	N/A		No data on renal dose adjustments. Use with caution.
Penicillin G Sodium (Benzylpenicillin / C-Pen)	**Leptospirosis:** • 1.5 - 2million units IV q6h **SSTI:** • 2 - 4 million units IV q4-6h **Infective endocarditis (Penicillin susceptible Streptococci):** • 3 million units IV q4h **Infective endocarditis (Streptococci relatively resistant to Penicillin, NVS), Neurosyphilis, Ocular syphilis or CNS Infection:** • 4 million units IV q4h	**Mild to moderate infection**	<10	Administer a full dose, followed by 50% of the normal dose q6h
			HD	1 million units IV q6h
		Serious infection	10–50	2 - 3 million units IV q4h
			<10 or HD	2 million units IV q4–6h

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		CrCl (mL/min)*	ADJUSTED DOSE
Penicillin VK (Phenoxymethyl-penicillin)	**Treatment or prophylaxis of infections caused by susceptible organisms:** • 500 - 750 mg PO q6-8h **Prophylactic; Rheumatic fever or Asplenia, Prophylaxis for post-splenectomy** • 250 mg PO q12h	N/A	No data on renal dose adjustments. Use with caution.
Pentamidine	**PCP Treatment:** • 4 mg/kg IV q24h	10–50	3 mg/kg IV q24h
		<10	4 mg/kg IV q48h
	PCP Prophylaxis: • Aerosolized Pentamidine 300 mg as a single dose* **HSgB Practice: Administer for a single dose and commence cART or alternative PCP prophylaxis at the earliest opportunity.* *Use beyond 1 month requires approval from Dato' Dr Suresh Kumar*	N/A	No dosage adjustment required
Piperacillin / Tazobactam (Tazocin)	**Usual dose:** • 4.5 gm IV q8h over 4 hours **or** • 4.5 gm IV q6h* **For Pseudomonas Infection:** • 4.5 gm IV q6h* **Tazocin 4.5 gm IV q6h may be administered as intermittent infusion (over 30 mins) or as an extended infusion (over 4 hours).* *Refer to DIAMS - Prolonged / Extended Infusion of Antibiotics in Adult Patients for more information*	If original dose: **4.5 gm IV q8h over 4 hours**	*Original dose of Tazocin 4.5 gm IV q8h in normal renal function is recommended to be administered as extended infusion (over 4 hours) only.* *Refer to DIAMS – Prolonged / Extended Infusion of Antibiotics in Adult Patients for recommendation for renal adjustment.*
		If original dose: **4.5 gm IV q6h**	20-40: 4.5 gm IV q8h <20 or HD: 4.5 gm IV q12h *(preferred)* **or** 2.25 gm IV q6h *(alternative)*

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		CrCl (mL/min)*	ADJUSTED DOSE
Polymyxin B **** Caution!*** *There are 2 types of Polymyxin available in HSgB; Polymyxin B & **Colistin (Polymyxin E)**. Please ensure that reference is made to the right Polymyxin.*	***(1 mg = 10,000 IU)*** **IV Dose:** **Loading dose:** 2.0 - 2.5 mg/kg IV **Suggested weight-based dosing:** • 35-39 kg: 75 mg • 40-49 kg: 100 mg • 50-59 kg: 125 mg • 60-69 kg: 150 mg • 70-79 kg: 175 mg • ≥ 80 kg: 200 mg **Maintenance Dose:** 1.25-1.5 mg/kg IV q12h *(to administer 12h after loading Dose)* **Suggested weight-based dosing:** • 35-39 kg: 50 mg IV q12h • 40-49 kg: 62.5 mg IV q12h • 50-59 kg: 75 mg IV q12h • 60-69 kg: 87.5 mg IV q12h • 70-79 kg: 100 mg IV q12h • 80-89 kg: 112.5 mg IV q12h • ≥ 90 kg: 125 mg IV q12h **Intrathecal (IT) Dose (for Meningitis):** ***(1 mg = 10,000 IU)*** • 5 mg IT q24h x 3-4 days, then 5 mg IT q48h	N/A	No dose adjustment for renal impairment. **Please refer to **Polymyxin Dosing Guide [click here]** for full dosing & administration guide.*
Praziquantel	**Schistosomiasis:** **1. S. *haematobium*, S. *intercalatum*, or S. *mansoni*:** • 40 mg/kg/day PO in 1-2 divided doses x 1 day **2. S. *japonicum* or S. *mekongi*:** • 60 mg/kg/day PO in 2-3 divided doses x 1 day **Neurocysticercosis:** • 50 mg/kg/day PO in 3 divided doses x 10-14 days	N/A	No dosage adjustment required

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		CrCl (mL/min)*	ADJUSTED DOSE
Primaquine	**PCP Treatment*:** • 30 mg (base) PO q24h ** In combination with Clindamycin*	HD	No data on renal dose adjustments in HD. Use with caution. [On dialysis days – administer dose after dialysis]
Pyrazinamide (PZA)	25 mg/kg PO q24h* (Range: 20 - 30 mg/kg). **Round up to the nearest 250 mg.*	<30 or HD	25–35 mg/kg/dose three times per week [For patients on dialysis, administer dose after dialysis]
Pyrimethamine	**Toxoplasmosis Encephalitis (TE)** **1. Treatment of acute infection*:** • <60 kg: 50 mg PO q24h • ≥60 kg: 75 mg PO q24h ** In combination with Clindamycin & Folinic Acid* **2. Maintenance Therapy:** • <60 kg: 50 mg PO 2x/week • ≥60 kg: 75 mg PO 2x/week	N/A	No dosage adjustment required
Quinine Sulfate	650 mg salt (524 mg base) PO q8h	<10 or HD	650 mg once, then 325 mg PO q12h
Raltegravir (RAL) (Isentress)	**Usual dose:** • 400 mg PO q12h **Co-administration with Rifampicin:** • 800 mg PO q12h	N/A	No dosage adjustment required.

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Ravidasvir	**Hep C Treatment in patients co-infected with HIV*:** • 200 mg PO q24h ** In combination with Sofosbuvir.*	N/A	No renal adjustment required. Ravidasvir is eliminated unchanged by biliary excretion and renal excretion is negligible.
Remdesivir	**Covid pneumonia:** **Body weight ≥ 40 kg:** • Loading dose 200 mg on Day 1, followed by 100 mg OD x 2 days **Body weight > 3.5 kg to < 40 kg:** • Loading dose 5 mg/kg on Day 1, followed by 2.5 mg/kg/dose OD x 2 days	N/A	Dose adjustments are not required for renally impaired patients, including those on HD *(FDA approved July 2023, based on REDPINE & CATCO Trials)*
Ribavirin	**Treatment of HIV & HCV co-infected patients with liver cirrhosis*:** • **<75 kg:** 1,000 mg/day PO (400 mg AM, 600 mg PM) • **≥75 kg:** 1,200 mg/day PO (600 mg PO q12h) ** In combination with Daclatasvir and Sofosbuvir.* **Dose adjustment for patients who develop anaemia (Hb <10 g/dL) with Ribavirin:** • 600 mg PO q24h	30–50	Alternate dosing 200 mg PO and 400 mg PO q48h
		<30 or HD	200 mg PO q24h (based on limited data)
Rifabutin (RFB)	**Usual dose:** • 5 mg/kg/day (usually 300 mg) PO q24h **With concomitant Ritonavir boosted PIs:** • 150 mg PO q24h **With concomitant INSTI (DTG or RAL):** • 5 mg/kg/day (usually 300 mg) PO q24h **With concomitant Efavirenz (EFV):** • 450 mg PO q24h **With concomitant regimen containing both PI and TAF: NOT recommended**	<30	Consider 50% of dose q24h if toxicity is suspected.

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		CrCl (mL/min)*	ADJUSTED DOSE
Rifampicin (RIF) (Used as part of combination therapy)	**Mycobacterium or MRSA Infection*:** • 10 mg/kg IV or PO q24h** (usually 600 mg IV or PO q24h) ** For MRSA Bacteraemia, add Rifampicin only after culture clearance.* *** Round up to the nearest 150 mg.* **Prosthetic Joint Infection or Prosthetic Valve Endocarditis:** • 300 - 450 mg IV or PO q12h** **With HIV PIs: Not recommended***** ***** Consider changing to Rifabutin.*	< 10 or HD	Usual dose. Some recommend a 50% decrease in dose
Ritonavir (RTV) (Norvir)	**Treatment of HIV infection in combination with other agents*:** • 100 mg PO q24h (if combined with **Atazanavir (ATV)** (Reyataz)) • 100 mg PO q12h (if combined with **Darunavir (DRV)** (Prezista)) ** Ritonavir is used exclusively as Protease Inhibitors booster using lower Ritonavir doses.* ** Ritonavir is also available as combination tablet with Lopinavir. Refer to: **Lopinavir / Ritonavir (LPV/RTV)** (Kaletra))*	N/A	No dosage adjustment required.
Sofosbuvir (SOF)	**Hep C Treatment in patients co-infected with HIV*:** • 400 mg PO q24h ** In combination with Daclatasvir or Ravidasvir*	<30	**Not recommended.** Up to 20-fold higher sofosbuvir metabolite observed in patients with this level of renal impairment.

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		CrCl (mL/min)*	ADJUSTED DOSE
Sofosbuvir (SOF)/ Velpatasvir (VEL)	**Hep C Treatment in patients co-infected with HIV:** **With EFV or Etravirine:** • **Not recommended.** Co-administration is not recommended due to decreased concentrations of velpatasvir. **With other cART*:** • SOF 400 mg / VEL 100 mg (= 1 tablet) PO q24h ** With Tenofovir Disoproxil Fumarate (TDF): SOF/VEL increases TDF levels, which may increase the risk of TDF-associated renal toxicity. This combination should be used with caution and close monitoring of renal profile in patients with eGFR <60.*	<30	**Not recommended.** Up to 20-fold higher sofosbuvir metabolite observed in patients with this level of renal impairment.
Streptomycin	15 mg/kg IM or IV q24h (max: 1 gm) *Use with caution in patients with renal insufficiency.*	10-50	15 mg/kg q24-72h
		<10	15 mg/kg q72-96h
		HD	12-15 mg/kg on dialysis days [Administer dose after dialysis]
Tenofovir Alafenamide (TAF)	**Treatment of HIV in Hep B co-infected patients:** • 25 mg PO q24h	<15 and not on dialysis	**Not recommended**
		<15 on HD	No dosage adjustment required. [On dialysis days, administer dose after HD]
Tenofovir Alafenamide/ Emtricitabine (TAF/FTC)	**Treatment of HIV in Hep B co-infected patients:** • TAF 25 mg/ FTC 200 mg (= 1 tablet) PO q24h	<30	Co-formulated tablet **is not recommended** in CrCl <30 ml/min. Use split pills and adjust dose according to recommendations for the individual drugs: • ***Tenofovir Alafenamide (TAF)*** • Consider substituting Emtricitabine (FTC) with an alternative agent [***Lamivudine (3TC)***] as FTC as a standalone tablet is not available in HSgB.

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		CrCl (mL/min)*	ADJUSTED DOSE
Tenofovir Disoproxil Fumarate (TDF)	300 mg PO q24h	30–49	300 mg PO q48h [Consider switching to ***Tenofovir Alafenamide (TAF)*** for treatment of HBV]
		10–29	300 mg PO q72–96h [Consider switching to ***Tenofovir Alafenamide (TAF)*** for treatment of HBV]
		<10 and not on dialysis	**Not recommended**
		HD	300 mg PO once weekly; Administer dose after dialysis
Tenofovir Disoproxil Fumarate/ Emtricitabine (TDF/ FTC) (Tenvir-Em)	TDF 300 mg/ FTC 200 mg (= 1 tablet) PO q24h	30–49	1 tablet PO q48h* *Monitor for worsening renal function or consider switching to alternative agents for patients with HBV co-infection: • ***Tenofovir Alafenamide (TAF)*** • ***Lamivudine (3TC)*** [Emtricitabine (FTC) is substituted with 3TC due to FTC as a standalone tablet is not available in HSgB].
		<30 or HD	Co-formulated tablet **is not recommended** in CrCl <30 ml/min. Consider switching to alternative agents for patients with HBV co-infection: • ***Tenofovir Alafenamide (TAF)*** • ***Lamivudine (3TC)*** [Emtricitabine (FTC) is substituted with 3TC due to FTC as a standalone tablet is not available in HSgB].
Tenofovir Disoproxil Fumarate/ Emtricitabine/ Efavirenz (TDF/ FTC/ EFV) (Atripla/Viraday)	TDF 300 mg/ FTC 200 mg/ EFV 600 mg (= 1 tablet) PO q24h	< 50	Co-formulated tablet **is not recommended** in CrCl <50 ml/min. Use split pills and adjust dose according to recommendations for the individual drugs: • ***Tenofovir Disoproxil Fumarate/ Emtricitabine (TDF/ FTC)*** *(Tenvir-Em)* • ***Efavirenz (EFV)*** *(Stocrin)* **OR** Consider switching to alternative agents for patients with HBV co-infection: • ***Tenofovir Alafenamide (TAF)*** • ***Lamivudine (3TC)*** *[Emtricitabine (FTC) is substituted with 3TC due to FTC as a standalone tablet is not available in HSgB].* • ***Efavirenz (EFV)*** *(Stocrin)*

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ANTIMICROBIAL STANDARD DOSE & RENAL ADJUSTED DOSE IN ADULTS (FOR GENERAL & SPECIFIC INDICATIONS)

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Tenofovir Disoproxil Fumarate/ Lamivudine/ Dolutegravir (TDF/ 3TC/ DTG) (Teldy)	TDF 300 mg/ 3TC 300 mg/ DTG 50 mg (= 1 tablet) PO q24h	< 50	Co-formulated tablet **is not recommended** in CrCl <50 ml/min. Use split pills and adjust dose according to recommendations for the individual drugs: • ***Tenofovir Disoproxil Fumarate/ Emtricitabine (TDF/ FTC)*** *(Tenvir-Em)* • ***Dolutegravir (DTG)*** *(Tivicay)* Consider switching to alternative agents for patients with HBV co-infection: • ***Tenofovir Alafenamide (TAF)*** • ***Lamivudine (3TC)*** [*Emtricitabine (FTC) is substituted with 3TC due to FTC as a standalone tablet is not available in HSgB*]. • ***Dolutegravir (DTG)*** *(Tivicay)*
Terbinafine (Lamisil)	**PO dose:** **Usual dose:** • 250 mg PO q24h	< 50	Limited data on renal dose adjustments. May consider using the following regimen with caution: • 50% of usual dose PO q24h **or** • 100% of usual dose PO q48h Monitor frequently for adverse effects (eg: GI & hepatic). Alternatively, consider using alternative agent.
Tigecycline (Tygacil)	**Usual dose [eg: Treatment for intra-abdominal infection (IAI) or skin & soft tissue infection (SSTI)]:** • 100 mg IV load, then 50 mg IV q12h **Bacteraemia:** *Avoid in bacteraemia. However, if used, higher dose is required:* • 200 mg IV load, then 100 mg IV q12h **Treatment of CRE, *Acinetobacter baumannii*, *Stenotrophomonas maltophilia**:** • 200 mg IV load, then 100 mg IV q12h **** Refer to MoCHIs – Drug Resistant GNR Treatment Algorithm for more info.***	N/A	No dosage adjustment required

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			CrCl (mL/min)*	ADJUSTED DOSE
Trimethoprim/ Sulphamethoxazole [TMP/SMX] (Bactrim)	*Attention!* Bactrim is used for various indications, and both the dosing and renal adjustments vary depending on the specific indication. Please click the link below to access the relevant sections: 1. PCP 2. Toxo 3. MSSA or MRSA 4. Salmonellosis 5. Gram Negative (GNR) 6. Melioidosis			
Attention! Each Bactrim vial/tablet in HSgB contains **80mg TMP** & 400mg SMX (single strength). Bactrim dose is calculated based on the **TMP component.** **Part 1: PCP/Toxo Dosing** Scroll further down or click on the box below for: Part 2: **MSSA or MRSA** Dosing Part 3: **Salmonellosis/ Gram Negative (GNR)** Dosing Part 4: **Melioidosis** Dosing	**PCP**	**PCP Treatment:** • 15 - 20 mg/kg (TMP) IV or PO **per day** (divided into 3-4 doses)	15–30	5 mg/kg (TMP) IV or PO q12h
			<15 or HD	5 mg/kg (TMP) IV or PO q24h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
		PCP Maintenance/Prophylaxis (CD4 < 200): • TMP 80 mg/ SMX 400 mg (= 1 tablet) PO q24h	< 30 or HD	May use normal dose with caution. [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
	Toxo	**Toxoplasmosis Encephalitis (TE)** **Acute Infection Treatment:** • 5 mg/kg (TMP) IV or PO q12h	<30 or HD	5 mg/kg (TMP) IV or PO q24h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
		Toxoplasmosis Encephalitis (TE) **Maintenance Therapy:** • TMP 160 mg/ SMX 800 mg (=2 tablets) PO q12h	<30 or HD	Reduce dose by 50% [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
		Toxoplasmosis Encephalitis (TE) **Primary Prophylaxis (CD4 < 100):** • TMP 160 mg/ SMX 800 mg (=2 tablets) PO q24h	<30 or HD	TMP 80 mg/ SMX 400 mg (= 1 tablet) PO q24h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION		DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
			CrCl (mL/min)*	ADJUSTED DOSE
Trimethoprim/ Sulphamethoxazole [TMP/SMX] (Bactrim) Attention! Each Bactrim vial/tablet in HSgB contains **80mg TMP** & 400mg SMX (single strength). Bactrim dose is calculated based on the **TMP component.** **Part 2: MSSA or MRSA Dosing** Scroll further up or click on the box below for: Part 1: **PCP/Toxo** Dosing Scroll further down or click on the box below for: Part 3: **Salmonellosis/ Gram Negative (GNR)** Dosing Part 4: **Melioidosis** Dosing	**MSSA or MRSA**	**MSSA/MRSA Skin & Soft Tissue Infection (SSTI)** **or** **MSSA/MRSA Bone & Joint Infection** 8 - 12 mg/kg/day (TMP) IV or PO in 2 divided doses	15–30	4 - 6 mg/kg/day (TMP) IV or PO in 2 divided doses
			<15 or HD	2 - 3 mg/kg (TMP) IV or PO q24h ***or*** 4 - 6 mg/kg (TMP) IV or PO q24-48h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
		MRSA / MSSA Bacteraemia: 10 - 15 mg/kg/day (TMP) IV in 2 divided doses	15–30	5 – 7.5 mg/kg/day (TMP) IV in 1-2 divided doses
			<15 or HD	5 mg/kg (TMP) IV q24h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
		Oral Option for Low risk MSSA/MRSA Bacteraemia ***(Must fulfill ALL of the criteria below):*** ○ Completed 5-7 days of IV therapy ○ Culture clearance after 24-96H ○ No sign/symptoms of metastatic infection ○ No non-removable foreign devices ○ No prosthetic heart graft/valve ○ No severe comorbidities • TMP 160 mg/ SMX 800 mg (= 2 tablets) PO q12h **** This regimen must be discussed with ID Specialist or Consultant*** *Ref: Efficacy and safety of an early oral switch in low-risk S. aureus BSI (SABATO) trial. AJ Kaasch et al. The Lancet, 2024.*	≥ 15	No dosage adjustment required
			<15 or HD	No data on renal dose adjustment & suitability of ESRF patients for this regimen.

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION		DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY		
			CrCl (mL/min)*		ADJUSTED DOSE
Trimethoprim/ Sulphamethoxazole [TMP/SMX] (Bactrim) Attention! Each Bactrim vial/tablet in HSgB contains **80mg TMP** & 400mg SMX (single strength). Bactrim dose is calculated based on the **TMP component.** **Part 3: Salmonellosis/ Gram Negative (GNR) Dosing** Scroll further up or click on the box below for: Part 1: **PCP/Toxo** Dosing Part 2: **MSSA or MRSA** Dosing Scroll further down or click on the box below for: Part 4: **Melioidosis** Dosing	**Salmonellosis**	**Salmonellosis (non-thyphi):** • TMP 160 mg/ SMX 800 mg (= 2 tablets or ampoules) IV/PO q12h **OR** • Alternative regimen for severe/ disseminated infection: 5 mg/kg/day (TMP) IV q12h	If original dose: **TMP 160 mg/ SMX 800 mg (= 2 tablets or vials) IV/PO q12h**	<30 or HD	Reduce dose by 50% [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
			If original dose: **5 mg/kg/ day (TMP) IV q12h**	15–30	5 mg/kg/day (TMP) IV or PO q24h
				<15 or HD	2.5 - 5 mg/kg (TMP) IV or PO q24h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*
	Gram Negative (GNR)	**Resistant Gram-negative (GNR) Infections**:** • **Cystitis/Pyelonephritis:** TMP 160 mg/ SMX 800 mg (= 2 tablets) IV or PO q12h • **All Other Infections:** 8–12 mg/kg/day (TMP) IV or PO in 2-3 divided doses* **Consider max dose of 960 mg TMP per day* ***Applicable to:*** ○ **AmpC-E (CEK or SPM)** **CEK** - *Citrobacter freundii, Enterobacter cloacae, Klebsiella aerogenes* **SPM** - *Serratia marcescens, Providencia spp, Morganella morganii* ○ **ESBL-E or CRE** ○ ***Stenotrophomonas maltophilia***	15–30		4 - 6 mg/kg/day (TMP) IV or PO in 2 divided doses
			<15 or HD		2 - 3 mg/kg (TMP) IV or PO q24h ***or*** 4 - 6 mg/kg (TMP) IV or PO q24-48h [On dialysis days, administer dose after HD] *Use with caution and appropriate monitoring or use alternative agent.*

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION		DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
			CrCl (mL/min)*	ADJUSTED DOSE
Trimethoprim/ Sulphamethoxazole [TMP/SMX] (Bactrim) Attention! Each Bactrim vial/tablet in HSgB contains **80mg TMP** & 400mg SMX (single strength). Bactrim dose is calculated based on the **TMP component.**	**Melioidosis**	**Melioidosis *(Burkholderia pseudomallei infection)*** (consider graded introduction of Bactrim* - refer to table below*) • **< 40 kg:** TMP 160 mg/ SMX 800 mg (= 2 tablets) PO q12h • **40-60 kg:** TMP 240 mg/ SMX 1,200 mg (= 3 tablets) PO q12h • **> 60 kg:** TMP 320 mg/ SMX 1,600 mg (= 4 tablets) PO q12h ***Given together with T. Folic Acid 5mg OD***	31-50	• **≤ 60 kg:** SMX/TMP 240 mg (= 3 tablets) PO q12h • **> 60 kg:** SMX/TMP 320 mg (= 4 tablets) PO q12h
			≤30 or HD	• **≤ 60 kg:** SMX/TMP 120 mg (= 1.5 tablets) PO q12h • **> 60 kg:** SMX/TMP 160 mg (= 2 tablets) PO q12h
			CAPD	as per eGFR <15
			CRRT	as per eGFR ≤30

***Bactrim graded introduction for Melioidosis:**

- Due to the high incidence of adverse effects associated with Bactrim, gradual introduction of Bactrim may be considered.
- The gradual introduction may be applied for all melioidosis patients, including those requiring ICU therapy, EXCEPT for neurological melioidosis, where full-dose Bactrim is started immediately.
- If Bactrim has not been incorporated into the initial intensive therapy (eg: melioidosis pneumonia / bacteremia without a focus), **graded Bactrim introduction may be started during intensive phase to ensure full Bactrim dose is achieved before the cessation of the IV therapy.**
- Graded dose will require approx. 1-2 weeks, but a more rapid introduction may be considered for unwell patients or deep-seated infections.

Graded introduction Bactrim for patients over 60 kg with normal renal function over 8 days:

1. 40/200 mg **(½ tablet) BD** for **2 days,** then
2. 80/400 mg **(1 tablet) BD** for **2 days**, then
3. 160/800 mg **(2 tablets) BD** for **2 days**, then
4. 240/1200mg **(3 tablets) BD** for **2 days**, then
5. Full dose 320/1600 mg **(4 tablets) BD** subsequently

* For patients < 60 kg or those with impaired renal function, refer to ID Physician to determine the graded dosing schedule.

Adapted from: The 2024 revised Darwin Melioidosis Treatment Guideline.

Part 4: Melioidosis Dosing

Scroll further up or click on the box below for:

Part 1: **PCP/Toxo** Dosing

Part 2: **MSSA or MRSA** Dosing

Part 3: **Salmonellosis/ Gram Negative (GNR)** Dosing

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Valganciclovir (Valcyte)	**Treatment of cytomegalovirus (CMV) Retinitis in HIV Patients:** **1. Induction therapy:** • 900 mg PO q12h with food x 2-3 weeks	40 - 59	450 mg PO q12h
		25 - 39	450 mg PO q24h
		10 - 24	450 mg PO q48h
		<10 or HD	Not recommended by the manufacturer. Consider using IV Ganciclovir
	Treatment of cytomegalovirus (CMV) Retinitis in HIV Patients: **2. Maintenance therapy:** • 900 mg PO q24h with food	40 - 59	450 mg PO q24h
		25 - 39	450 mg PO q48h
		10 - 24	450 mg PO 2x/week
		<10 or HD	Not recommended by the manufacturer. Consider using IV Ganciclovir
Vancomycin	**IV Dose:** ** Refer to DIAMS – Vancomycin Protocol*		
	PO dose: ***Clostridioides difficile* associated Diarrhoea (CDI or CDAD):** • 125 - 500 mg PO q6h	N/A	Minimal systemic absorption No dosage adjustment necessary
Voriconazole (Vfend)	**IV Dose:** 6 mg/kg IV q12h for two doses, then 4 mg/kg IV q12h	<50	**IV** voriconazole **is not recommended** by the manufacturer because of potential toxicity due to accumulation of sulfobutylether cyclodextrin (vehicle of IV product). **Switch patients with CrCl<50 mL/min to oral voriconazole** when feasible. No need for dosage adjustment when the oral dose is used.
	PO dose: 200–300 mg PO q12h		

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DRUG(S)	ORIGINAL / STANDARD DOSE BASED ON INDICATION	DOSAGE ADJUSTMENT IN RENAL INSUFFICIENCY	
		CrCl (mL/min)*	ADJUSTED DOSE
Zidovudine (AZT)	**Prevention of maternal-foetal HIV transmission during labour and delivery for HIV-positive pregnant women who are:** • **NOT on HIV treatment** **or** • **On HIV treatment but with a viral load > 1000 copies/mL** **Intrapartum IV Infusion dose*:** • 2 mg/kg IV loading for the 1st hour, followed by • 1 mg/kg/hour for 2 hours (or until cord clamping)	N/A	No adjustment required for Intrapartum IV Infusion regimen.
	***Intrapartum IV Infusion:** • For **planned/elective C-section**, allow at least 3 hours of IV Zidovudine infusion prior to proceeding to delivery • For **unplanned/emergency C-section**, consider administering loading dose of IV Zidovudine prior to delivery. Completing the full 3-hour infusion is not required. However, the paediatrics team must be informed post delivery to ensure appropriate prophylaxis for the newborn.		
Zidovudine / Lamivudine (AZT/3TC) (Combivir)	AZT 300 mg/3TC 150 mg (= 1 tablet) PO q12h	<50	Co-formulated tablet **is not recommended** in CrCl<50. Use split pills and adjust dose according to recommendations for the individual drugs: • **Lamivudine (3TC)** • *Consider substituting Zidovudine (AZT) with an alternative agent, as AZT as a standalone capsule has been phased out.*

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2. Hospital Sungai Buloh Antibiotic Guideline 2024
3. National Antibiotic Guideline 2024, MOH latest edition
4. Sanford Guide to Antimicrobial Therapy
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6. UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2021
7. Guide to Antimicrobial Therapy in the Adult ICU, 2023
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18. Efficacy and safety of an early oral switch in low-risk Staphylococcus aureus bloodstream infection (SABATO): an international, open-label, parallel-group, randomised, controlled, non-inferiority trial. Kaasch, Achim JValiente, Adoración et al. The Lancet Infectious Diseases, Volume 24, Issue 5, 523 – 534
19. NT Disease Control Bulletin | 31 December 2023 | Vol 30, No. 4 | Revised Darwin Melioidosis Treatment Guideline

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PRIC Newsletter

Polymyxin Dosing Guide

Updated March 2022

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	Polymyxin B 500,000 IU/vial	Polymyxin E (Colistin) 1MU/vial
Compound [1]	Active drug	Prodrug - Colistimethate Sodium (CMS)
Department	MED (KPK)	MED, ANAES
Dosing conversion [1]	500,000 IU = 50 mg	1 MU - 33mg colistin-based activity (CBA)

Indication & Dose [1-3,7]

Polymyxin B 500,000 IU/vial

Invasive infection due to multi-drug resistant (MDR) gram negative bacilli
Intravenous (IV):
Loading dose (LD): 2.0 - 2.5 mg/kg stat
Maintenance dose (MD): 1.25 - 1.5 mg/kg BD

Ventriculitis/meningitis
Intrathaecal (IT):
Dose: 5 mg OD for 3 days, then 5 mg EOD for ⩾ 2 weeks after culture clearance

Suggested weight-based dosing chart for MDR :

Weight (kg)	LD		MD (each dose)	
	mg	vials	mg	vials
35 - 39	75	1.5	50	1
40 - 49	100	2	62.5	1.25
50 - 59	125	2.5	75	1.5
60 - 69	150	3	87.5	1.75
70 - 79	175	3.5	100	2
80 - 89	200	4	112.5	2.25
90 - 100	200	4	125	2.5

Note:
1. To use total body weight (**TBW**) to calculate the dose for all patients.
2. **No renal dose adjustment required.**
3. Evidence for administration > 200mg per infusion is limited.

The weight-based doses provided in the table serves as a general recommendation. Kindly take note the proper dosing range (indication specific) is listed above.

Polymyxin E (Colistin) 1MU/vial

Invasive infection due to multi-drug resistant (MDR) gram negative bacilli*
IV:
Loading dose (LD): 9 MU STAT (usual dose) OR

Weight (kg)	Dose (MU)
< 50	6
51 - 60	7
61 - 74	8
> 75	9

Maintenance dose (MD): 4.5 MU Q12H.
Administer 12 hrs after LD.

*Preferred for treatment of urinary tract infection (CMS convert to active drug in the urinary tract)

Note: Loading dose no renal dose adj. required.
Renal Impairment without Dialysis

Cr Cl (mL/min)	Dose
< 10	2.0 MU Q12H
10 - 29	2.5 MU Q12H
30 - 39	3.0 MU Q12H
40 - 49	3.5 MU Q12H
50 - 59	4.0 MU Q12H

*Use adjusted body weight for CrCl in obese patient
**For ICU dosing, refer ICU Antibiotic Guideline 2017.

Intermittent Haemodialysis (HD)
Maintenance dose: 2 MU BD daily
Supplemental dose after dialysis:
- 3-hour session: 1.2 MU
- 4-hour session: 1.6 MU

*Supplemental dose can be served together with the next regular dose.

Continuous Renal Replacement Therapy (CRRT)
6.7 MU BD

Administration [1,4]	**IV infusion** over 60 - 90 minutes	**LD: IV Infusion** over 1 - 2 hours **MD: IV Infusion** over 30 minutes
Reconstitution & Dilution [5,6]	**Dilute dose in:** **IV:** 300-500 mL of D5W (max conc: 1mg/ml) [8] **IT:** 10 mL of NS, preservative-free (single dose container)	**IV:** Reconstitute 1 MU (1 vial) with 2 mL WFI Dilute loading dose (9 MU) with 100 mL NS/WFI Dilute maintenance dose with 10-50 mL NS/WFI
Stability [5,6] **(After reconstitution)**	**Room Temp (<25°C) :** No data **Fridge (2-8°C)** : 72 hours (No data on stability after dilution)	**Room Temp (<25°C) :** Use immediately **Fridge (2-8°C)** : 24 hours (No data on stability after dilution)

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