UCMC Transplant Program - Infectious Prophylaxis Guidelines

For the following recipients: (1) Kidney and (2) Kidney after Pancreas

	Patient Population		Medication	Dosing Regimen	
Peri-operative	All non-penicillin-allergic		Cefazolin	Pre-op cefazolin: ≤ 80 kg: 1 gm IV on call to OR; > 80 kg: 2 gm IV on call to OR Post-op cefazolin: 1 gm IV every 8 hours x 24 hours	
	Penicillin-allergic		Vancomycin	Pre-op vancomycin: 20 mg/kg IV on call to OR Post-op vancomycin: 15 mg/kg IV x 1 dose, given 12 hours after pre-op dose	
PJP Initiate POD 1-2	All non-sulfa-allergic		Bactrim SS[1]	1 tablet PO Monday, Wednesday, Friday[1]	6 months (lifelong in HIV+ recipients)
	Sulfa-allergic		Dapsone[2] Pentamidine[3] Atovaquone	100 mg PO daily 300 mg by nebulization once monthly 1500 mg PO daily	6 months (lifelong in HIV+ recipients)
CMV Initiate POD 1-2 *If concern for renal function or marrow suppression adjust dose as described below*	High risk	CMV IgG Donor + / Recipient −	Valganciclovir[4,5]	900 mg PO daily[6]	6 months (monitoring[7])
	Intermediate risk	CMV IgG Donor + / Recipient + CMV IgG Donor − / Recipient +	Valganciclovir[4,5]	900 mg PO daily[6]	3 months (monitoring[7])
	Low risk	CMV IgG Donor − / Recipient −	Acyclovir[4]	800 mg PO twice daily[6]	Depends on EBV serostatus[8]

[1] **Bactrim (trimethoprim-sulfamethoxazole) SS (single strength) dose adjustments:**

- HD = 1 tablet SS PO 3x weekly, after each dialysis (dialysis days only)
- CVVH or CVVHD= no dose adjustment necessary
- Leukopenia = refer to leukopenia management guidelines.

[2] **Dapsone:** do not check G6PD routinely; only in those of Mediterranean descent

[3] **Pentamadine:** premedicate with albuterol 2.5 mg by nebulization.

[4] **Anti-viral dose adjustments:** ONLY for renal dysfunction (refer to table for dose adjustments)

- LEUKOPENIA = refer to leukopenia management guidelines.
- IF PERSISTENT NEUTROPENIA: hold & monitor CMV RT Quant PCR weekly.
- LETERMOVIR: 2nd option for persistent neutropenia. Consider letermovir pending insurance and nonformulary approval and consult Txp ID. Letermovir use may require initiation of acyclovir for HSV prophylaxis if < POD #30 or undergoing rejection treatment and CMV PCR monitoring every 2 weeks.

[5] If unable to take PO valganciclovir: convert to ganciclovir 5 mg/kg IV day (adjust for renal function)

[6] Anti-viral renal dose adjustments:

CrCl (mL/min)	Valganciclovir PO	Ganciclovir IV	Acyclovir PO
>70	900 mg daily	5 mg/kg q 24 hour	800 mg 2x day
60-69	900 mg daily	2.5 mg/kg q 24 hours	800 mg 2x day
50-59	450 mg daily	2.5 mg/kg q 24 hours	800 mg 2x day
40-49	450 mg daily	1.25 mg/kg q 24 hours	800 mg 2x day
25-39	450 mg M-W-F	1.25 mg/kg q 24 hours	800 mg 2x day
10-24	450 mg twice weekly	0.625 mg/kg q 24 hours	400 mg 2x day
<10 or iHD	450 mg twice weekly after iHD	0.625 mg/kg 3x/week after iHD	400 mg 2x day after HD
PD	450 mg twice weekly	0.625 mg/kg 3x/week	400 mg 2x day
CVVH	450 mg q 48 hours	1.25 mg/kg q 24 hours	800 mg 2x day
CVVHD/HDF	450 mg daily	2.5 mg/kg q 24 hours	800 mg 2x day

[7] CMV monitoring (valganciclovir):

- If prophylaxis is held/delayed: monitor CMV RT Quant PCR weekly until resumed or initiated.
- After completion of prophylaxis therapy: monitor CMV RT Quant PCR every 2 weeks x 3. If CMV viremia develops change CMV PCR monitoring to weekly (refer to CMV treatment guidelines)

[8] Acyclovir Duration

EBV	EBV IgG	Acyclovir Duration
High risk	Donor + / Recipient −	3 months
Intermediate risk or Low risk	Donor + / Recipient + Donor − / Recipient + Donor − / Recipient −	1 month

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