UCMC Liver Transplant - Infectious Prophylaxis Guidelines

	Patient Population		Medication	Dosing regimen and Length of Therapy	
Peri-operative	All non penicillin allergic		Ceftriaxone AND Ampicillin	Pre-op: ceftriaxone 2g IV AND ampicillin 2g IV Post-op: ceftriaxone 2g IV x 1 dose 24h after pre-op dose AND ampicillin 1g IV q6h (or per renal function) x 48 hours	
	Penicillin allergic		Vancomycin AND Ciprofloxacin	Pre-op vancomycin: 20mg/kg on call to OR Pre-op ciprofloxacin: ≤ 80kg 400mg IV ; > 80kg: 600mg IV on call to OR Post-op: vancomycin 15mg/kg IV x 1 dose and ciprofloxacin 400mg IV x 1 dose 12 hours after pre-op dose and then as per renal function for 48 hours total	
Fungal **Initiate POD 1**	HIGH Risk *Targeted prophylaxis should be given to recipients meeting any of the listed criteria*	1) Renal replacement (RRT) *PRIOR* to OLT 2) RRT within 30 days *POST* OLT 2) Antifungal therapy *PRIOR* to OLT 3) Roux-en-y performed 4) Intraop use of > 10 units of PRBC 5) Reoperation 6) Biliary leak within 90 days of OLT 7) Re-transplantation 8) Recipient of living donor	Fluconazole[1]	200mg PO daily	1 month
PJP **Initiate POD 1-2**	All		Bactrim SS[2]	1 tablet PO daily	*Duration Varies* 3 months (Standard + Basiix) 6 months (if any Thymo) Lifelong (HIV+ recipients)
	Sulfa allergic		Dapsone[3] Pentamidine[4] Atovaquone	100mg PO daily 300mg per nebulizer once monthly 1500 mg PO daily	
Viral **Initiate POD 1-2** *If concern for renal function or marrow suppression adjust dose as described below*	HIGH Risk	CMV IgG Donor + / Recipient -	Valganciclovir[5-9]	900mg PO daily[6]	6 months (monitoring[7,8])
	INTERMEDIATE RISK	CMV IgG Donor + / Recipient + CMV IgG Donor - / Recipient +	Valganciclovir[5-9]	450 mg PO daily[6]	3 months (monitoring[7,8])
	LOW RISK	CMV IgG Donor - / Recipient -	Acyclovir[5]	800 mg PO twice daily[6]	1 month (monitoring[7])

[1]**Fluconazole dose adjustments:** CrCl < 50 = 100 mg PO daily; CVVH = no dose adjustment
HD = 200mg PO 3x week; administer after each dialysis session on dialysis days only

[2]**Bactrim SS (trimethoprim-sulfamethoxazole) dose adjustments**
Neutropenia: HOLD if ANC<500 cells/ µL and resume when ANC >1000 cells/ µL
CrCl < 30 = 1 tablet PO Mon, Wed, Fri; CVVH = no dose adjustment
HD = 1 tablet SS PO 3x weekly, after each dialysis (dialysis days only)

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

[4]**Pentamidine:** premedicate with albuterol 2.5 mg per nebulizer

[5]**Anti-viral dose adjustments:** ONLY for renal dysfunction (refer to table for dose adjustments)
IF PERSISTENT NEUTROPENIA: hold & monitor CMV RT PCR Quant weekly.
LETERMOVIR: 2nd line for persistent neutropenia (pending insurance and nonformulary approval). Consult Txp ID. Use may require (a) initiation of acyclovir for HSV prophylaxis if ≤ POD #30 or undergoing rejection treatment and (b) CMV PCR monitoring every 2 weeks.

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

[7]If antiviral held or delayed: CMV PCR Quant weekly q Mon until resumed or initiated

[8] When valganciclovir therapy is completed: CMV RT PCR Quant every 2 weeks x 3. If CMV viremia develops change CMV PCR monitoring to weekly (refer to CMV treatment guidelines)

[5]Anti-viral prophylactic therapy renal dose adjustments

CrCl (mL/min)	Valganciclovir PO	Valganciclovir PO	Ganciclovir IV	Acyclovir PO
>70	900 mg daily	450 mg daily	5 mg/kg q24 hours	800 mg 2x day
60-69	900 mg daily	450 mg daily	2.5 mg/kg q24 hours	800 mg 2x day
50-59	450 mg daily		2.5 mg/kg q24 hours	800 mg 2x day
40-49	450 mg daily		1.25 mg/kg q24 hours	800 mg 2x day
25-39	450 mg M-W-F		1.25 mg/kg q24 hours	800 mg 2x day
10-24	450 mg twice weekly		0.625 mg/kg q24 hours	400 mg 2x day
<10 or iHD	450 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 q48 hours		1.25 mg/kg q24 hours	800 mg 2x day
CVVHD/HDF	450 mg daily		2.5 mg/kg q24 hours	800 mg 2x day

May 2022