MOTP CLINICAL DIRECTIVES

Program: Liver Transplantation
Title: Liver Transplant Recipient Management Protocols – CMV, HSV, Fungi, PJP and HBV
Intranet Location: *https://intra.lhsc.on.ca/sites/default/files/uploads/Transplant%20Recipient%20Mangement%20Prophylaxis%20Liver.pdf*

		High Risk Patient	Treatment / Dose / Duration	Caution / Monitoring	Alternative	Start
Cytomegalovirus (CMV)	Liver	• CMV mismatch Donor +/ Recipient -	*Primary prophylaxis therapy recommended:* • Valganciclovir (Valgan) 900 mg p.o. daily X 6 months	• Renal dose adjustment may be required • Both medications may cause bone marrow suppression	Ganciclovir IV	MOTU upon discharge
		• CMV seropositive recipients	*Preemptive therapy recommended:* • Weekly CMV PCR for 12 weeks after transplantation, and if a positive CMV threshold (3 Log) is reached, refer to Transplant ID • Treatment at the discretion of Transplant ID: 1) Valganciclovir 900 mg p.o. BID, or 2) IV Ganciclovir 5 mg/kg IV every 12 h until negative test *These patients should receive HSV prophylaxis (see HSV section)*			
			Issued 2018/Feb/09	*Last Reviewed: 2022/Jun/09*	*Last Revised:2022/Jul/08* *Approved by Anouar Teriaky*	

		High Risk Patient	Treatment / Dose / Duration	Caution / Monitoring	Alternative	Start
Herpes Simplex (HSV)	Liver	• All post-transplant patients	*All transplant recipients not receiving CMV prophylaxis should be on HSV prophylaxis for 1 month* • Acyclovir 400 mg p.o. BID for 1 month	• Renal dose adjustment may be required	Valganciclovir for CMV prophylaxis	MOTU upon discharge
			Issued 2022/Jul/08	*Last Reviewed:*	*Last Revised:* *Approved by Anouar Teriaky*	

		High Risk Patient	Treatment / Dose / Duration	Caution / Monitoring	Alternative	Start
Fungi: Aspergillosis / Candida / Cryptococcus	Liver	• Retransplant • >20 units PRBC during or including auto-transfusion • Renal failure with RRT • Fulminant hepatic failure • Previous fungal infection • Re-operation • Choledochojejunostomy/ Choledochoduodenostomy • Early colonization of candida in peri-operative stage • MELD score above 30 • split, living donor • Early rejection • Multi-organ transplant	High Risk: • luconazole 400 mg PO OD x 4 weeks • Consult Transplant ID All Other Recipients: • Fluconazole 100 mg PO OD x 7 days post-op	Adjust the dose of Tacrolimus and monitor Tacrolimus level	Consult Transplant ID, treatment at discretion of Transplant ID	Post-op

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		High Risk Patient	Treatment / Dose / Duration	Caution / Monitoring	Alternative	Start
Pneumocystis Jiroveci Pneumonia (PJP)	Liver	• Universal prophylaxis	• Septra double strength Mon/Wed/Fri x 12 months	• Renal function • Cholestasis • Leukopenia, hyperkalemia	If allergy to Septra use: • Atovaquone 1500 mg PO daily • Dapsone 50-100 mg (daily) – G6PD testing prior to use • Pentamidine (monthly inhaled) • Clindamycin 300 mg and Pyrimethamine 15 mg	MOTU pre-D/C

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			Treatment / Dose / Duration	Caution / Monitoring	Alternative	Start
Hepatitis B Virus (HBV)	Liver	**High Risk Patient** Recipient HBsAg +, and any of: • High HBV DNA level (≥4 logs) • HDV + • HIV +	• Hepatitis B immunoglobulin (HBIG) • 15 mL (4680 IU) intra-operatively followed by 5 more doses daily Plus Require lifelong antiviral treatment - choose one of the following: • Tenofovir 300mg daily (covered by ODB) OR • Entecavir 0.5mg daily (covered by ODB) OR • Tenofovir Alafenamide 25mg daily	HBV DNA q6 months	None	HBIG: Intra- op Post-op
		Low Risk Patient Recipient HBsAg + • Low HBV DNA level (<4 logs)	• HBIG not required Require lifelong antiviral treatment - choose one of the following: • Tenofovir 300mg daily (covered by ODB) OR • Entecavir 0.5mg daily (covered by ODB) OR • Tenofovir Alafenamide 25mg daily	HBV DNA q6 months	None	Post-op
		Low Risk Patient Recipient HBcAb + and HBsAg – OR Donor HBcAb +	• HBIG not required Require lifelong antiviral treatment - choose one of the following: • Tenofovir 300mg daily (covered by ODB) OR • Entecavir 0.5mg daily (covered by ODB) OR • Tenofovir Alafenamide 25mg daily OR	HBV DNA q6 months	None	Post-op

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