Table 1: Baseline Patient Demographics and Characteristics

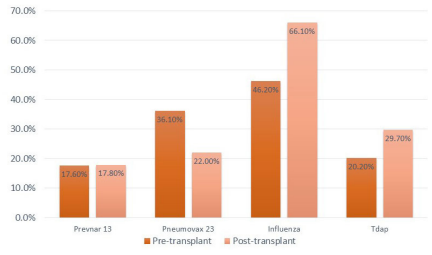
Age at Transplant (mean ± SD), years		
	55.89 ± 9.55	
Sex	**N**	**%**
Male	87	73.1
Female	32	26.9
Race	**N**	**%**
White/Caucasian	45	37.8
Black/African-American	16	13.4
Asian	12	10.1
Other Race	46	38.7
Ethnicity	**N**	**%**
Hispanic/Latino	42	35.3
Not Hispanic/Latino	77	64.7
Cause of Liver Failure	**N**	**%**
Alcoholic liver disease	32	26.9
Hepatocellular carcinoma	34	28.6
NAFLD	72	10.1
Cryptogenic	17	14.3
Combination*	12	10.1
Hepatitis C	4	3.4
Previous Transplant	**N**	**%**
Yes	4	3.4
Presence of Outpatient ID Consult	**N**	**%**
Yes	41	34.5
No	78	65.5
Comorbidities	**N**	**%**
DM II	50	42.0
CAD	19	16.0
Cancers (w/o HCC)	6	5.0
HTN	63	52.9
CKD	12	10.1
Autoimmune	17	14.3

* Combination – Refers to multiple causes of liver failure being found in varying combinations such as Hep C + Alcoholic liver disease or NAFLD + Hepatitis C etc. One cause could not be pinpointed in these cases

Table 2: Vaccination Rates for Hepatitis A (HAV), Hepatitis B (HBV), Herpes Zoster (HZV) Vaccines

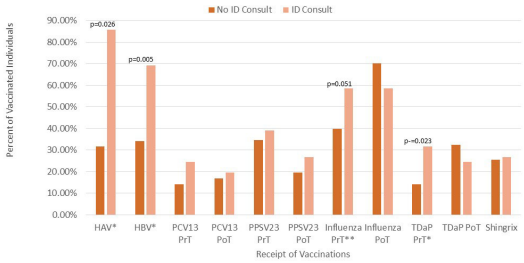
		HAV		HBV		HZV**	
Vaccine Characteristics		N	%	N	%	N	%
Eligible	Yes	29	24.4	67	56.3	119	100.0
	No	90	75.6	52	43.7	0	0.0
Received	Yes	13	44.8	32	47.8	31	26.1
	No	16	55.2	35	52.8	88	73.9
Check of Protection Titers at least 4 weeks after vaccine?	Yes	13	100.0	29	90.6		
	No	0	0.0	3	9.4		

Graph 1: Vaccination Rates Pre- and Post-Liver Transplantation



Conclusion. We are not meeting national vaccination standards set by the American Society of Transplantation (AST) for optimal vaccination in this population. Our study can inform of possible solutions to increase vaccination rates in this population such as the simple addition of a smartphrase within EMR notes to remind providers to order appropriate vaccinations and eventually, a more long term solution of creation of a dedicated vaccination clinic and/or routine ID pre-transplant evaluations for all transplant candidates.

Graph 2: Comparing Vaccination Rates Pre- and Post-Transplant with or without an Outpatient ID Consult



Disclosures. **All Authors**: No reported disclosures

1380. Real-world Effectiveness and Complications of Valganciclovir (VGC) Prophylaxis for Kidney Transplant (KT) Recipients at High Risk for Cytomegalovirus (CMV) infection (CMV Donor (D)+/Recipient (R)-)

Caroline G. Roumpz, n/a[1]; Josh Kohl, RN[2]; Kailey L. Hughes, MPH[2]; Amit D. Raval, PhD[3]; Yuexin Tang, PhD[4]; Cornelius J. Clancy, MD[1]; Minh-Hong Nguyen, MD[1]; [1]University of Pittsburgh, Pittsburgh, Pennsylvania; [2]University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania; [3]Merck and Co., Inc., Rahway, New Jersey; [4]Merck and Co., Inc, North wales, Pennsylvania

Session: P-79. Transplant: Studies of Pre-transplant Screening and Evaluation

Background. CMV infection is common post-kidney transplant (KT). Valganciclovir (VGC) prophylaxis (Px) has lessened CMV infection among high-risk (CMV D+/R-) KT recipients (KTRs), but VGC can induce neutropenia. We quantified the burden of CMV infection among CMV D+/R- KTRs and healthcare resources required to manage these patients (pts).

Methods. Retrospective study of pts undergoing KT between Jan 2014-Dec 2018. Study and control groups (gps) were CMV D+/R- and R+ KTRs, respectively. Standard post-KT immunosuppression was tacrolimus and mycophenolate mofetil (MMF). D+/R- and R+ KTRs received VGC Px (900 mg/day) for 6 and 3 months (mos), respectively.

Results. Clinical characteristics did not differ between D+/R- (n=131) and R+ (n=140) pts. Median VGC Px duration was longer for D+/R- (183 vs 104 days, p< .01). Within the first 6 mos post KT, a higher proportion of D+/R- KTRs received ≥1-course of granulocyte-stimulating factor (G-CSF) (15% vs 6%, p=.02). VGC Px was stopped prematurely/intermittently in 20% and 10% of D+/R- and R+, respectively, due to neutropenia (p=0.02); corresponding data for stopping MMF for ≥1 mos were 32% and 21% (p=.05). 50% of D+/R- pts received < 3 mos Px. Leukopenia prompted hospitalization in 3% of D+/R- vs 0% of R+ pts (p=.05). CMV infections did not differ between gps (7% vs 6%, p=.80); however, VGC-resistant CMV was higher in D+/R- gp (3% vs 0%, p=.05). Between 6-12 mos post-KT, D+/R- KTRs had higher rates of CMV infection (24% vs 4%,p< .01), VGC resistance (5% vs 0%, p=.01), hospitalization due to CMV (11% vs 2%, p=.01), MD intervention (22% vs 2%,p< .01), and infectious disease (ID) referral (8% vs 2%,p= .04). 57% of CMV resistance was observed in pts who prematurely stopped VGC. Hospitalizations were longer for CMV infections in D+/R- KTRs (8 vs 1 d, p< .01). There was a trend toward higher rejection for D+/R- KTRs (13% vs 6%, p=.09).

Conclusion. Universal VGC Px in D+/R- KTR remains challenging and requires significant resources for monitoring and intervention for neutropenia, including MD involvement and ID referral. Intermittent/premature stop of VGC may have led to VGC-resistant CMV,and stop of MMF may have led to a trend of higher cellular rejection at 1 yr. There is critical need for new CMV agents with a better safety profile.

Disclosures. **Amit D. Raval, PhD**, **Merck and Co., Inc.** (Employee) **Yuexin Tang, PhD**, **JnJ** (Other Financial or Material Support, Spouse's employment)**Merck & Co., Inc.** (Employee, Shareholder) **Cornelius J. Clancy, MD**, **Merck** (Grant/Research Support) **Minh-Hong Nguyen, MD**, **Merck** (Grant/Research Support)

1381. Do Gut Microbiome Profiles Correlate with Hospital Length of Stay During Hematopoietic Stem Cell Transplantation?

Angelico Mendy, MD[1]; Kitty Tierney, RN[2]; Tara Mink, RN[2]; Walaa Hussein, PhD[1]; Peter Monaco, BA[1]; Claire Weinstein, BA[1]; Prathyusha Kandala, BS[3]; Racheal Wilkinson, BS, MLS[1]; Kavya Patel, MD[4]; Senu Apewokin, MD[1]; [1]University of Cincinnati, Cincinnati, Ohio; [2]The Jewish Hospital, Cincinnati, Ohio; [3]Emory University, Los Angeles, California; [4]University of Cincinnati Medical Center, Cincinnati, Ohio

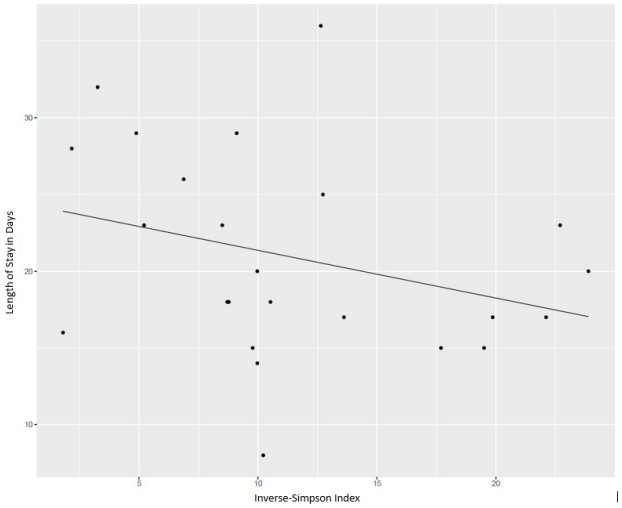
Session: P-79. Transplant: Studies of Pre-transplant Screening and Evaluation

Background. Length of stay is not only an indicator of how successful a hospitalized patient's treatment and recovery is, but is also an indicator of fiscal costs to the hospital. Hematopoietic stem cell transplants (HSCT) patients typically experience extended hospital admissions that can vary significantly patient to patient with hospital discharge dependent upon a recovered white blood cell count. Recent literature suggests a gut microbial influence on hematopoiesis. We sought to explore potential associations between gut microbiome diversity and the length of stay in patients undergoing HSCT in the inpatient setting.

Methods. Within two healthcare systems, we identified patients who would receive conditioning chemotherapy and subsequent HSCT in the inpatient setting. Pre-chemotherapy stool was collected, sequenced with shotgun metagenomics, and analyzed for gut microbial diversity using Inverse-Simpson index. The length of admission or length of stay during their transplant process was recorded. We assessed whether there was an association with gut microbial diversity and length of stay.

Results. 24 patients we evaluated for diversity and length of stay. There was no significant correlation between age or gender and length of stay. Significant difference in length of stay was seen between allogenic vs autogenic transplants (p value ≤0.01). Within the 24 patients, lengths of stay ranged from 8 to 36 days with a mean average of 20.9 days. Gut diversity ranged from 1.8 to 23.9. An overall negative association between length of stay and diversity was seen, though this was determined not statistically significant (p value 0.09).

Length of Stay correlation with pre-chemotherapy Gut Microbiome diversity



Conclusion. Our study showed no significant association between gut microbial diversity and inpatient length of stay during HSCT. Overall, a trend towards increased length of stay in patients with decreased diversity was noted. Additional studies of greater participant size are necessary to confirm or further study these findings.

Disclosures. **All Authors**: No reported disclosures

1382. A Prospective Epidemiological Study BK Polyomavirus DNAuria and DNAemia within the First Year after Kidney Transplantation

Pannawat Mongkolrattanakul, MD[1]; Jackrapong Bruminhent, MD[2]; Tanaya Siripoon, MD[3]; Punlop Wiwattanathum, MD[1]; Suchin Worawichawong, MD[1]; Susarak Kantachuvesiri, MD[4]; [1]Ramathibodi Hospital, Mahidol University, Bangkok, Krung Thep, Thailand; [2]Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Krung Thep, Thailand; [3]Division of Infectious Disease, Ramathibodi Hospital, Bangkok, Krung Thep, Thailand; [4]Faculty of Medicine Ramathibodi Hospital, Bangkok, Krung Thep, Thailand; the Ramathibodi Transplant Infectious Diseases (RTID) Group

Session: P-79. Transplant: Studies of Pre-transplant Screening and Evaluation

Background. Screening and early detection for the preceding BK polyomavirus (BKV) DNAuria and DNAemia to prevent the occurrence of BK polyomavirus BKV-associated nephropathy (BKPyVAN) among kidney transplant (KT) recipients has not been universally utilized and never assessed in a setting where the resource is limited. Therefore, we aimed to investigate this entity's incidence, risk factors, and outcome with this intervention at our institution.

Methods. A prospective study of KT recipients at a tertiary care transplant center in Bangkok, Thailand, was conducted between January 2019 and March 2020. All patients underwent preemptive monitoring of urine and plasma BKV DNA load, measured by quantitative real-time PCR at 1, 2, 3, 6, 9, and 12 months post-KT. Low- and high-level BKV DNAuria was defined as urine BKV DNA load of < and > 7log10 copies/mL, respectively. Low- and high-level BKV DNAemia was defined as plasma BKV DNA load of < and > 4log10 copies/mL, respectively. The incidences were calculated by Kaplan-Meier analysis. The chi-square or student's T-test compared clinical characteristics between those with and without high-level BKV DNAuria as appropriate. Risk factors of high-level BKV DNAuria were analyzed using Cox proportional hazard model.

Results. Among 99 evaluable KT recipients, a mean (SD) age was 42 (11) years, 64.6% were male, and 69.6% received an induction immunosuppressive therapy. Within 12 months post-KT, the incidences of low-level BKV DNAuria, high-level BKV DNAuria, low-level BKV DNAemia, and high-level BKV DNAemia were 22.63%, 13.14%, 9.49%, and 5.11%, respectively. High panel reactive antibody (PRA) was associated with high-level BKV DNAuria at 6 and 12 months, (HR 1.02 [95% CI (1.00-1.04)], P=0.019) and (HR 1.02 [95% CI (1.00-1.04)], P=0.023), respectively. Underlying diabetes mellitus was associated with high-level BKV DNAuria (HR 3.49 [95% CI (1.28-9.51)], P=0.015) at six months; however, not at 12 months. There was no allograft rejection directly related to a reduction of immunosuppression for BKV infection observed.

Conclusion. BKPyV infection is also prevalent among KT recipients in a resource-limited setting, however, without unfavorable consequence. Those with high-level PRA and underlying diabetes could be at risk of high-level BKV DNAuria after KT.

Disclosures. **All Authors**: No reported disclosures

1383. Universal *Strongyloides* Screening in a Heart Transplant Program in South Carolina: Just How Endemic Is It?

Ruth Adekunle, MD, MSCR[1]; Deeksha Jandhyala, MD[1]; Jessica Lewis, MD[1]; [1]Medical University of South Carolina, Charleston, South Carolina

Session: P-79. Transplant: Studies of Pre-transplant Screening and Evaluation

Background. *Strongyloides stercoralis* is endemic in sub-Saharan Africa, Southeast Asia, Latin America, and the southeastern United States, particularly Appalachia, where *Strongyloides* seroprevalence approaches 2%. SC is considered a state in which *Strongyloides* is endemic, however the degree of endemnicity is not known. Here we define the epidemiology of chronic strongyloidiasis in our state, through data obtained via universal screening of heart transplant candidates at our center.

Methods. This single center retrospective study was performed at a 700 bed academic medical center that is the only comprehensive transplant center in SC. All adult patients who underwent heart transplant evaluation 1/1/2019 - 12/31/2020 were included. Routine pre-transplant evaluation by Transplant Infectious Diseases (TxID) was implemented in the heart transplant program in 2015 and universal screening with *Strongyloides* IgG began in late 2018. We assessed demographics, risk factors for exposure to *Strongyloides*, treatment, and outcomes for seropositive subjects.

Results. During the study period, 218 patients underwent heart transplant evaluation. Adherence to universal screening was 96.8% (211/218). 187 subjects (88.6%) had negative screening results (≤ 0.9 IV) and 24 subjects (11.4%) had equivocal or positive screening results (≥ 1.0 IV). Demographics and risk factors for the 24 equivocal/positive subjects are presented in Table 1. 15 equivocal/positive subjects (66.7%) received ivermectin and 9 (33.3%) did not. The majority of untreated patients were declined for transplant (8/9) and did not have a TxID evaluation (6/9). One untreated patient was waitlisted for transplant and has received ivermectin since being identified in this study. There were no episodes of hyperinfection or disseminated infection in the cohort.

Table 1. Demographics and risk factors for subjects with equivocal or positive Strongyloides IgG

	n (%)
Sex	
Male	21 (87.5)
Female	3 (12.5)
Race/ethnicity	
Black	16 (66.7)
White	6 (25.0)
Hispanic	2 (8.3)
Country of origin	
United States	19 (79.2)
Mexico	1 (4.2)
Unknown	4 (16.7)
Military service	4 (16.7)*
Overseas travel	6 (25.0)
County of residence in Appalachian region	4 (16.7)

*never deployed

Conclusion. Universal screening of adult heart transplant candidates at SC's only transplant center detected a *Strongyloides* seroprevalence rate of 11.4%. The majority of subjects with equivocal/positive *Strongyloides* IgG were born in the US and did not have other known risk factors (residence in the Appalachian region of SC, military service, overseas travel). These data suggest a high level of endemnicity of strongyloidiasis in SC.

Disclosures. **All Authors**: No reported disclosures

1384. Practice Variations in Pre-Hematopoietic Stem Cell Transplantation Infectious Disease Evaluation

Liam S. Conway-Pearson, MD[1]; Jennifer Pisano, MD[2]; Roberto A. Sica, MD[1]; Margaret E. McCort, MD MS[3]; [1]Montefiore Medical Center, New York, New York ; [2]University of Chicago, Chicago, IL; [3]Montefiore Medical Center / Albert Einstein College of Medicine, Bronx, New York