(20.8%) received their vaccines during the IDPT visit or shortly after. Compared to the prior cohort, all vaccines rates improved with the post IDPT visit (p<0.001) (Table 3).

| Variable          | Value |
|-------------------|-------|
| Age (years) median (IQR) | 57 (49.65) |
| Male sex (N, %)    | 154 (62.3) |
| Racial (N, %)      | 1 (0.55) |
| Asian              | 62 (33.9) |
| Other              | 7 (1.8)  |
| White              | 153 (61.7) |
| Transplant type (N, %) | 16 (6.3) |
| Heart              | 45 (25.1) |
| Kidney             | 67 (36.6) |
| Liver              | 30 (16.4) |
| Lung               | 53 (18.8) |
| Multivacelar       | 5 (3.6)  |
| Pancreas           | 3 (1.6)  |
| Insurance type (N, %) | 1 (0.5)  |
| Blue Cross Blue Shield | 43 (23.5) |
| Tricare            | 34 (14.7) |
| Medicaid           | 19 (10.4) |
| Medicare           | 94 (45.1) |
| Other              | 13 (7.2) |

Distance (miles) to transplant center (mean, IQR)

| Overall            | 52.5 (13.3–62.2) |
| Heart              | 44 (13.3–56.6)   |
| Kidney             | 51.1 (11.2–59.3) |
| Liver              | 86.5 (22.7–189.5) |
| Lung               | 37.6 (12.5–73.6) |
| Multivacelar       | 60.2 (13.6–203.8) |
| Pancreas           | 43.5 (34.3–43.5) |
| CCI score (Mean, SD) | 10.8 (9.6) |

Table 1. Characteristics of 183 SOT candidates

Table 2. Vaccination status in 183 SOT candidates before and after IDPT visit

| Vaccine          | Eligible SOT, N | Vaccination pre-IDPT visit, N (%) | Additional vaccination post-IDPT visit, N (%) | Total vaccinated, N (%) |
|------------------|----------------|----------------------------------|---------------------------------------------|------------------------|
| Influenza        | 183            | 98 (53.6)                        | 41 (22.6)                                   | 139 (76%)              |
| Pneumococal 13 V | 183            | 67 (36.6)                        | 62 (33.9)                                   | 129 (70.5)             |
| Pneumococal 23 V | 183            | 87 (47.5)                        | 26 (14.2)                                   | 113 (61.7)             |
| Hepatitis B*     | 101            | 31 (30.1)                        | 42 (40.8)                                   | 73 (70.9)              |
| Tdap             | 183            | 101 (55.3)                       | 29 (15.8)                                   | 130 (71%)              |
| Td               | 183            | 16 (8.7)                         | 7 (3.9)                                     | 23 (12.6)              |
| Varicella (Shingrix) | 183       | 36 (19.7)                        | 65 (35.5)                                   | 101 (55.2)             |

Note: SOT, solid organ transplant; SOCT, solid organ transplant candidates. *Due to previous exposure, 100% of patients were already immune to Hep B.

Table 2. Vaccination rates among liver transplant recipients

Table 3. Vaccine uptake rates comparing prior cohort to post IDPT

| Vaccine          | Prior SOCT cohort vaccinated, N (%) | New SOCT cohort vaccinated post-IDPT, N (%) | P value |
|------------------|------------------------------------|--------------------------------------------|---------|
| Influenza        | 247 (46.6)                         | 139 (76)                                   | <0.001  |
| Pneumococal 13 V | 270 (50.9)                         | 129 (70.5)                                 | <0.001  |
| Pneumococal 23 V | 270 (50.9)                         | 113 (61.7)                                 | <0.001  |
| Hepatitis B*     | 167 (91.3)                         | 101 (70.9)                                 |         |
| Tdap             | 270 (47.7)                         | 130 (72)                                   |         |
| Td               | 270 (47.7)                         | 123 (72)                                   | <0.001  |

Table 3. Summary of vaccine uptake before and after IDPT

1378. Impact of Cytomegalovirus Prophylaxis on Clinical Outcomes in Kidney Transplantation: A United States Renal Data System-Medicare Linked Database Study

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

Background. Guidelines recommends cytomegalovirus (CMV) prophylaxis by CMV serostatus/risk status, as the currently available antiviral agents may lead to myelo-suppressive events in kidney transplant recipients (KTRs). Limited data exist for the United States (US) on the current clinical outcomes with CMV prophylaxis KTRs especially stratified by CMV risk strata. We examined the associations between clinical outcomes and CMV prophylaxis among adult KTRs stratified by CMV risk strata.

Methods. We employed a retrospective cohort design using the US Renal Data System registry linked Medicare data (2011-2017). The cohort included 22,918 adult KTRs with continuous Medicare Part A & B coverage for ≥6 months-pre and ≥12 months post KT and Part D coverage for ≥12 months-post KT. CMV prophylaxis was defined as ≥1 prescription fill or medical claim for valacyclovir or valganciclovir at prophylaxis doses within 28 days-post KT.

Results. CMV prophylaxis was utilized by 75% of the cohort. In no CMV prophylaxis group, 52.2% and 34.2% of high and intermediate CMV risk KTRs received valaciclovir (as either preemptive or deferred therapy), respectively. Among high risk KTRs, CMV prophylaxis group had significantly lower proportions of KTRs with CMV infection, OIs and myelosuppressive events (leukopenia: 18%; neutropenia: 15% thrombocytopenia: 19%); however, their differences were non-significant except for thrombocytopenia by CMV prophylaxis status (Table 1). CMV infection and myelosuppressive event rates were higher in high-risk than intermediate/low risk KTRs irrespective of CMV prophylaxis status.

Conclusion. CMV prophylaxis was associated with lower rates of CMV infection, OIs, NODAT and graft failure compared to no prophylaxis, however, the burden of CMV infection, OIs and myelosuppression was greater in high-risk KTRs indicating further research is needed on factors associated with greater disease burden in high-risk KTRs.

Disclosures. No reported disclosures

1379. Vaccination Rates among Liver Transplant Recipients at a Tertiary Care Hospital in Newark, NJ

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

Background. Transplant candidates and recipients are at increased risk of infectious complications of vaccine-preventable diseases due to their longstanding immunosuppressive regimens. We assessed the rates of vaccination in our liver transplant patients at University Hospital (UH) in Newark, NJ.

Methods. Retrospective chart-review including patients > 18 years old who underwent liver transplantation at UH for a 3-year period from 01/01/2017 to 07/20/2020. Data collected included demographics, clinical outcomes, eligibility and receipt of vaccinations before and after transplantation, protection titers after administration of hepatitis vaccinations and presence of an ID outpatient consultation. We looked at the following receipt of vaccinations: Prevnar-13, Pneumovax-23, Influenza, Tdap, Shingrix, Varivax, Havrix and Engerix/Heplisav. Characteristics of study participants was analyzed using descriptive statistics and Chi-Square/Fisher's Exact tests where appropriate.

Results. Nearly 40% of high-risk KTRs had myelosuppressive events in kidney transplantation recipients (KTRs). Limited data exist for the United States (US) on the current clinical outcomes with CMV prophylaxis KTRs especially stratified by CMV risk strata. We examined the associations between clinical outcomes and CMV prophylaxis among adult KTRs stratified by CMV risk strata.

Conclusion. CMV prophylaxis was utilized by 75% of the cohort. In no CMV prophylaxis group, 52.2% and 34.2% of high and intermediate risk KTRs received valaciclovir (as either preemptive or deferred therapy), respectively. Among high risk KTRs, CMV prophylaxis group had significantly lower proportions of KTRs with CMV infection, OIs and myelosuppressive events (leukopenia: 18%; neutropenia: 15% thrombocytopenia: 19%); however, their differences were non-significant except for thrombocytopenia by CMV prophylaxis status (Table 1). CMV infection and myelosuppressive event rates were higher in high-risk than intermediate/low risk KTRs irrespective of CMV prophylaxis status.

Conclusion. CMV prophylaxis was associated with lower rates of CMV infection, OIs, NODAT and graft failure compared to no prophylaxis, however, the burden of CMV infection, OIs and myelosuppression was greater in high-risk KTRs indicating further research is needed on factors associated with greater disease burden in high-risk KTRs.

Disclosures. 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. Roupmoz, n/a; Josh Kohl, RN; Kailey L. Hughes, MPH; Amit D. Raval, PhD; Yuexin Tang, PhD; Cornelius J. Clancy, MD; Minh-Hong Nguyen, MD; 1University of Cincinnati, Cincinnati, Ohio; 2University of Pittsburgh, Pittsburgh, Pennsylvania; 3University of Cincinnati Medical Center, Pittsburgh, Pennsylvania; 4Merck and Co., Inc., Rahway, New Jersey; 5Merck 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/interruptingly in 20% and 10% of D+/R- and R+, respectively, due to neutropenia (p=.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 (13% vs 6%, p=.02). Between 6-12 mos post KT, D+/R- KTRs had higher rate 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- KT 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.

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