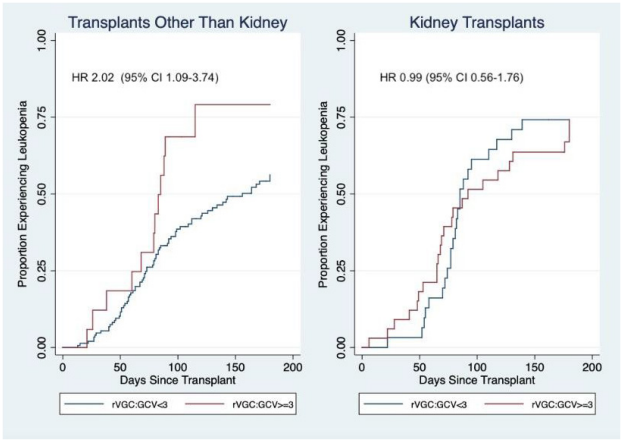
Figure 1



Conclusion: Initial doses of VGC used for SOT CMV prophylaxis are estimated to result in significantly higher GCV exposures than IV GCV doses. A relationship with risk of leukopenia was only seen in non-KT patients, possibly because of rapid recovery of renal function and dose adjustment in KT patients.

Disclosures. **Jason C. Gallagher, PharmD, FIDP, FCCP, FIDSA, BCPS**, **Allergan** (Consultant)**Astellas** (Consultant)**Merck** (Consultant, Grant/Research Support)**Nabriva** (Consultant)**Qpex** (Consultant)**scPharmaceuticals** (Consultant)**Shionogi** (Consultant)**Spero** (Consultant)**Tetraphase** (Consultant)

1704. Regional and Racial Disparities in Response to Antiretroviral Therapy (ART) among People Living with Human Immunodeficiency Virus (PLWH)

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Session: P-74. Virology: Studies of Treatment and Prevention of Viral Infections

Background. This study evaluated differences in viral suppression by race and region among PLWH in care at 10 community practices.

Methods. PLWH (≥18 yrs) starting a new ART between Jan'15-Sept'19 with viral load at regimen prescription (Rx) and ≥6 months (mo) of prior history were selected from Trio Health HIV EMR database. Logistic regression [LR] estimated the association of covariates with outcome "viremic" (viral load >50 cells/ml) among those with viral load recorded 12-15 mo after baseline (BSL). Sensitivity analyses were conducted using viral loads at 9-15 mo, in patients (pts) on their BSL regimens for ≥12 mo, and pts with dispensing data. Covariates: BSL suppression, gender, race, age, payer, region (South vs non-South), BSL single vs multi-tablet regimen (STR vs MTR), and switch status from BSL regimen. Multicollinearity was not present.

Results. Of 20271 PLWH, 10373 (51%) were treated in South (41% not suppressed at BSL including 30% treatment-naïve [TN]) and 9898 (49%) in non-South (32% not suppressed including 26% TN). The following groups had higher suppression rates at 12-15 mo: males (83%) vs females (80%) p=0.003; white (85%) vs black (78%) and other known race (78%) p< 0.001; insured by commercial or Medicare insurance (both 85%) vs Medicaid (76%) or uninsured (71%) p< 0.001; treated in non-South (88%) vs South (77%) p< 0.001; age ≥50 (87%) vs < 50 (80%) p< 0.001, those who did not switch from BSL regimen (84%) vs switchers (82%) p< 0.001; on STR (84%) vs MTR (81%) p< 0.001.

In LR, pts less likely to be suppressed at 12-15 mo were: < 50 adjusted odds ratio (aOR)=0.76 (0.67-0.88), unspecified gender vs female aOR=0.51 (0.28-0.92), black vs white aOR=0.65 (0.56-0.74), other race (Asian, etc.) vs white aOR=0.73 (0.59-0.91), insured by Medicaid vs commercially aOR=0.64 (0.50-0.82), uninsured vs commercially insured aOR=0.63 (0.53-0.75), treated in South aOR=0.43 (0.38-0.50), switched from BSL regimen aOR=0.75 (0.66-.086), on MTR vs STR aOR=0.81 (0.72-0.92), viremic at BSL aOR=0.41 (0.36-0.47). Sensitivity analyses results were similar.

Conclusion. Our findings highlighted higher rates of viremia among younger, black or other non-white race, pts treated in the South, on Medicaid or uninsured, on MTR, even after accounting for other characteristics.

Disclosures. **Keith M. Rawlings, MD**, **ViiV Healthcare** (Employee) **Joseph J. Eron, MD**, **Gilead Sciences** (Consultant, Research Grant or Support)**Janssen** (Consultant, Research Grant or Support)**Merck** (Consultant)**ViiV Healthcare** (Consultant, Research Grant or Support) **Julie Priest, MSPH**, **GlaxoSmithKline** (Employee, Shareholder) **Janna Radtchenko, MBA**, **Trio Health** (Employee) **Joseph Mrus, MD, MSc**, **ViiV Healthcare** (Employee) **Moti Rampogal, MD**, **Gilead Sciences** (Consultant, Research Grant or Support, Speaker's Bureau)**Janssen** (Consultant, Research Grant or Support, Speaker's Bureau)**Merck** (Consultant, Research Grant or Support)**ViiV Healthcare** (Consultant, Research Grant or Support, Speaker's Bureau) **Alan Oglesby, MPH**, **ViiV Healthcare** (Employee) **Richard A. Elion, MD**, **Gilead Sciences** (Advisor or Review Panel member, Research Grant or Support, Speaker's Bureau)**Jannssen** (Speaker's Bureau)**Proteus** (Research Grant or Support)**Trio Health** (Employee)**ViiV Healthcare** (Advisor or Review Panel member, Research Grant or Support)

1705. Treatment of Disseminated Adenovirus with Cidofovir in a Patient with HIV and ESRD

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Session: P-74. Virology: Studies of Treatment and Prevention of Viral Infections

Background: Adenovirus is a common cause of upper respiratory infections and gastroenteritis. Severe adenovirus infections and disseminated disease are known to occur in immunocompromised hosts. Cidofovir has been associated with clinical improvement in patients with severe or disseminated disease in which immunosuppression cannot be readily reversed or those unresponsive to supportive care. However, a narrow therapeutic index has limited its clinical use particularly in patients with end-stage renal disease (ESRD).

Methods: We present a case of disseminated adenovirus in a well-controlled person living with HIV (PLWHIV) treated successfully with dose-reduced cidofovir in the setting of ESRD on hemodialysis (HD) at the University of California Los Angeles. A literature review was conducted to investigate the treatment of severe adenovirus disease and use of cidofovir in patients with ESRD.

Results: Our patient is a 59 year-old woman who presented with fever, non-productive cough, and diarrhea. She is living with HIV/AIDS with virologic control and CD4 count of 470 treated with dose adjusted lamivudine, tenofovir alafenamide, and dolutegravir in the setting of ESRD on HD, chronic hepatitis B, and group I pulmonary hypertension. Her course was complicated by development of multifocal pneumonia with hypoxemic respiratory failure requiring high-flow nasal cannula. Adenovirus PCR was detected in stool, respiratory, and serum samples. Given high risk intubation, dose-reduced cidofovir 0.5 mg/kg weekly was given twice over three weeks with symptomatic improvement, elimination of serum adenovirus DNA, and without development of adverse medication-related effects.

Sixteen primary and review articles were identified discussing adenovirus pathology and treatment. A single pharmacokinetic study outlined a dosing regimen for cidofovir of 0.5 mg/kg weekly which provided comparable serum drug levels in asymptomatic patients with ESRD on HD compared to controls with adequate renal function.

Conclusion: This case report illustrates although there is limited data to establish the efficacy and safety of cidofovir for treatment of disseminated adenovirus infections in ESRD patients, dose-reduced cidofovir 0.5 mg/kg weekly while on HD appears to have been effective and well tolerated.

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

1706. Association between *Cytomegalovirus* Infection/Disease and Morbidity and Mortality in Kidney Transplantation: A Systematic Literature Review of Observational Studies

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Session: P-75. Virology: Studies of the Epidemiology of Viral Infections

Background. *Cytomegalovirus* (CMV) is a common pathogen in kidney transplant recipients (KTRs). KTRs may develop CMV viremia that is asymptomatic ('CMV infection') or associated with clinical and laboratory findings ('CMV disease') such as fever, leukopenia/neutropenia, and malaise ('CMV syndrome'), and/or evidence of specific organ(s) involvement ('CMV end-organ disease'). The extent to which CMV affects morbidity such as acute rejection (AR), graft loss (GL), other opportunistic infections (OI), or mortality in KTRs has not been systematically evaluated recently. Therefore, we examined the association between CMV infection/disease and morbidity and mortality in KTRs using a systematic review of observational studies from the last decade.

Methods. MEDLINE and Embase were searched to identify observational studies published between January 2008 and November 2018 reporting outcomes of interest by CMV status. Meta-analysis was used to derive pooled odds ratio (pOR) with 95% confidence intervals(CIs) using the random-effects models and I^2 statistics to estimate heterogeneity between studies using R *version* 3.5.1.

Results. Of 1,860 retrieved citations, 23 studies with a total of 6,994 KTRs met inclusion criteria. The majority of studies were conducted in Europe (N=14) and included participants regardless of donor/recipient CMV serostatus (N=14).