of selecting resistance, mainly in high-risk, i.e. donor CMV seropositive/recipient negative (D+/R-) KTR. Full-dose VGV is costly, and possibly associated with higher incidence of neutropenia and BK viremia. Our institution adopted half-dose VGV prophylaxis for R+ KTR in January 2018.

Methods: We included R+ KTR transplanted between 1/1/2014 and 12/31/2018 at our center. Data were censored at 1-year post-transplant, graft loss or death. Primary outcomes were early (< 6 months from transplant) and any CMV viremia. Secondary outcomes were neutropenia, BK viremia, graft loss and death. Categorical variables were compared with χ^2 or Fisher's exact tests, continuous variables with the Mann-Whitney test. We used log-rank and Gray's tests to compare cumulative incidence of outcomes, after adjustment by propensity score for differences in baseline characteristics.

Results: 106 R+ KTR received full-dose and 35 half-dose VGV. Antithymocyte globulin (ATG) induction was associated with significantly higher cumulative incidence of both early (P=0.017) and any (P=0.02) CMV viremia, compared to basiliximab induction (Fig. 1). After adjusting for gender and induction regimen, we noted a signal for higher cumulative incidence of any (P=0.044), but not early (P=0.598) CMV viremia in the full-dose VGV group (Fig. 2). There were no significant differences (P >0.1) in incidence of neutropenia, BK viremia, graft loss or death between the two groups. Cost savings were estimated at $2630 per CMV R+ KTR (Table 1).

Table 1. Comparison of outcomes and cost between the two anti-CMV prophylaxis groups. Data are presented as n (%), unless otherwise indicated.

	Full-dose VGV n=106	Half-dose VGV n=35	P-value[1]	P-value[2]
Early CMV viremia	2 (1.9)	0 (0)	1.000	0.598[a]
CMV viremia	6 (5.7)	0 (0)	0.336	0.044[b]
BKV viremia	24 (22.6)	8 (22.9)	0.978	0.878[c]
Graft loss	7 (6.6)	3 (8.6)	0.709	0.899[d]
Death	4 (3.8)	1 (2.9)	0.799	0.800[e]
ANC nadir (per μL: median, IQR)	2.7 (1.5-3.7)	2.4 (1.3-3.2)	0.167	
Neutropenia (ANC<1,500/μL)	23 (21.7)	10 (28.6)	0.490	
Estimated cost per patient	$5348	$2718		

ANC: Absolute Neutrophil Count
IQR: Interquartile (25^{th}-75^{th} percentile) range
1: Univariate analyses by Mann-Whitney, χ^2 or Fisher's exact test
2: Time-to-event analyses by Gray's or log-rank test
a: Adjusted for gender, induction regimen
b: Adjusted for gender, induction regimen, donor CMV status
c: Adjusted for age
d: Adjusted for donor CMV status
e: Adjusted for induction regimen

Fig 1. Probability of CMV viremia in KTR who received ATG vs. basiliximab induction.

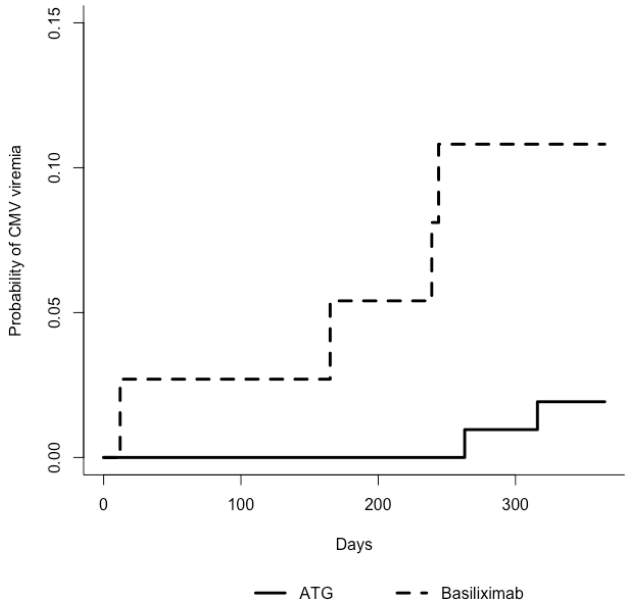
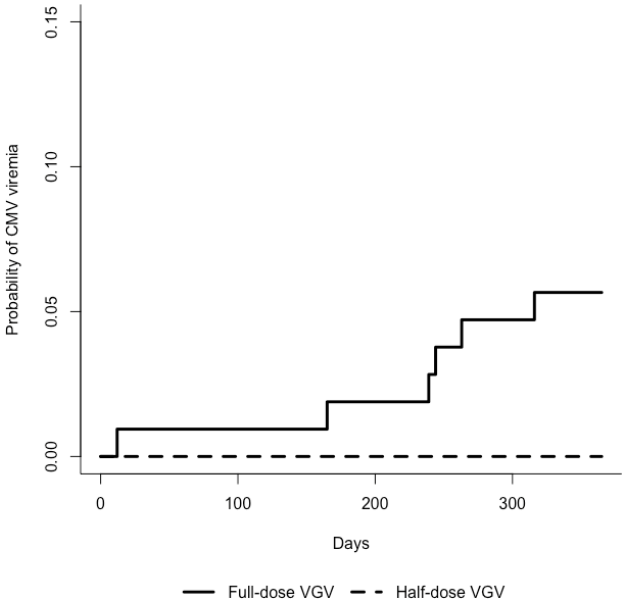


Fig 2. Probability of CMV viremia in KTR who received full-dose vs. half-dose VGV prophylaxis.



Conclusion: In our pilot series, half-dose VGV was at least as effective as full-dose VGV in preventing CMV viremia in R+ RTR, and less costly. If larger scale studies verify generalizability of these results, half-dose VGV may be considered as standard of care for R+ KTR. In KTR, the antimetabolite probably contributes to neutropenia more than VGV prophylaxis.

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

577. Incidence and Outcomes of Positive Outpatient Surveillance Blood Cultures in Hematopoietic Stem Cell Transplant (HSCT) Patients with Graft Versus Host Disease (GvHD) On High Dose ≥ 0.5 mg/kg/day (HD) and Low Dose < 0.5mg/kg/day (LD) Steroid Therapy

Sarah Perreault, PharmD BCPS BCOP[1]; Molly Schiffer, PharmD[2]; Jennifer Zhao, PharmD[2]; Dayna McManus, PharmD, BCPS[1]; Francine Foss, MD[1]; Lohith Gowda, PharmD[2]; Iris Isufi, MD[1]; Stuart Seropian, MD[1]; Jeffrey E. Topal, MD[1]; [1]Yale New Haven Hospital, New Haven, CT; [2]Yale New Haven Health, New Haven, Connecticut

Session: P-22. Care Strategies for Transplant Patients

Background: Treatment of GvHD with steroids increases the risk of infection in HSCT patients due to additive immunosuppression and may delay the diagnosis of infection due to lack of symptoms. Outpatient surveillance blood cultures in HSCT with GvHD being treated with HD steroids has demonstrated a blood culture positivity rate of 3.5%. Currently, the utility of surveillance cultures in patients receiving LD steroid therapy is unknown. Our practice includes weekly outpatient surveillance cultures for all GvHD patients treated with steroids regardless of the dose. The primary endpoint of this study was to assess the incidence of positive surveillance blood cultures in GvHD patients receiving HD or LD steroids. Secondary endpoints included number of patients treated, hospitalization, 30 day mortality due to infection, and organisms isolated.

Methods: This was a single-center, retrospective review of GvHD patients at Yale New Haven Hospital between January 2013 and May 2019. Patients were excluded if: lack of signs or symptoms of GvHD, treatment with steroids for any indication other than GvHD, and active GvHD without central line. Cultures from patients receiving antibiotics for concurrent infection were also excluded.

Results: A total of 71 patients met criteria with 901 blood cultures. On HD, eight patients (14%) had 12 positive cultures (4%), and on LD, 16 patients (25%) had 22 positive cultures (4%) (p=0.15). Treatment occurred in six patients (75%) with four (24%) requiring hospitalization on HD, and 12 patients (75%) with 10 (83%) requiring hospitalization on LD (p=0.45). The median duration of steroid therapy was 93 and 236 days with a median dose of steroids of 1mg/kg/day and 0.15mg/kg/day, respectively. The number of positive cultures/1000 steroid days was 1.2 on HD and 0.5 on LD (RR 2.2). 30 day mortality was only noted in one patient (8%) on LD. The most common organism in both groups was Coagulase-negative staphylococci with all six cultures on HD classified as contaminants and 6/10 cultures requiring treatment on LD.

Conclusion: Although the relative risk of positive surveillance blood cultures in HD patients compared to LD was twofold higher, there were clinically significant infections identified in the LD group.

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