595. Lettermovir (LTV) for Secondary Cytomegalovirus (CMV) Prevention in High Risk Hematopoietic Cell Transplant (HCT) Recipients: Interim Results of a Single Open Label Study

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Session: P-26. Care Strategies for Transplant Patients

**Background.** Lettermovir (LTV) is effective for prevention (ppx) of primary clinically significant CMV infection (csCMV) in the first 100 days after hematopoietic cell transplant (HCT). Data on LTV for secondary ppx is limited. We report on the efficacy and safety of LTV administered for 14 weeks as secondary CMV ppx.

**Methods.** Patients (pts) enrolled in an open label study of LTV (ClinicalTrials.gov identifier: NCT04017962) from August 2019 through February 2021 were analyzed. Key eligibility criteria were: CMV high risk (receipt of mismatched and/or T-cell depleted HCT and/or graft versus host disease (GVHD) requiring systemic immunosuppressants) AND prior csCMV with either undetectable CMV (≤136 IU/mL) or ≥2 consecutive values <300 IU/mL at enrollment. Pts with breakthrough csCMV on LTV or history of LTV resistance were excluded. LTV was administered for 14 weeks or csCMV whichever occurred first. The study duration was 24 weeks. CMV was monitored per standards of care. The primary endpoint was csCMV by week 14. Secondary endpoints were csCMV by week 24, LTV resistance, and adverse events (AEs) at least possibly related to LTV.

**Results.** Of 20 pts analyzed, the median age was 58 years (interquartile range [IQR] 46-63); 17 (85%) pts were CMV seropositive, 7 (35%) received mismatched HCT (haploidal identical, 3 cord blood; mismatched unrelated), 1 (4.5%) received CD34 selected allograft and 9 (45%) had GVHD at enrollment. Fourteen (70%) pts had received prior LTV. The median time from HCT to enrollment was 156 (IQR 37-244) and 55 (IQR 40-69) days for pts with and without prior LTV, respectively (P=0.16). CMV at enrollment was <136 IU/mL for 8 (40%) pts. By week 14, 4 (20%) pts developed csCMV at median 48 days (range 40-66). Resistance testing performed in 3 of the 4 pts, identified LTV resistance mutations in 2 pts. There were no AEs related to LTV, and none developed EOD. Two pts developed csCMV in the follow up phase. Three pts died during follow up (due to relapse, treatment related toxicity and GVHD), and four pts are in follow up.

**Conclusion.** LTV secondary prophylaxis was safe and prevented recurrent csCMV in high risk patients, including patients with prior LTV exposure. Our data supports the utility of LTV for secondary CMV prevention following HCT.

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596. The ID Physician Is Out: Are Remote ID E-Consults an Effective Substitute?

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Session: P-27. Clinical Practice Issues

**Background.** Teledmedicine (TM) can provide specialty ID care for remote and underserved areas; however, the need for dedicated audio-visual equipment, secure and stable internet connectivity, and local staff to assist with the consultation has limited wider implementation of synchronous TM. ID e-consults (ID electronic consultations or asynchronous*) are an alternative but data are limited on their effectiveness, especially patient outcomes.

**Methods.** In the setting of the COVID-19 pandemic and physician outage, we wanted to perform e-consults at a 380-bed tertiary care hospital located in Blair County, PA. We performed retrospective chart reviews of 121 patients initially evaluated by ID e-consults between April 2020 and July 2020. Follow-up visits were also conducted via e-consults with or without direct phone calls with the patient. Key patient outcomes assessed were length of stay (LOS), disposition after hospitalization, 30-day mortality from initial ID e-consult and 30-day readmission post-discharge.

**Results.** The majority of patients were white males and non-ICU (Table 1). The most common ID diagnosis was bacteremia (27.3%, 33/121), followed by skin and soft tissue infections (15.7%, 19/121) and bone/joint infections (14.9%, 18/121) (Figure 1). Table 2 shows patient outcomes. Average total LOS was 11 days and 7 days post-initial ID e-consult. 48.7% (59/121) of patients were discharged home and 37.2% (45/121) to a post-acute rehabilitation facility. 2.5% (3/121) of patients required transfer to a higher level of care facility; none of which were to obtain in-person ID care. The index mortality rate was 3.3% (4/121), which appears to be lower than published data for in-person ID care. The 30-day mortality rate was 4.1% (5/121), which is also comparable to previously reported for ID e-consults. 25.6% (31/121) of patients required readmission within 30 days but only 14.0% (17/121) were related to the initial infection.

Table 1. Demographics

| Age, mean (SD), γ | 61.2 (16.7) |
|-------------------|-------------|
| Female, %         | 50 (41.3)   |
| Male, %           | 71 (58.7)   |
| Race, %           |             |
| White             | 113 (35.0)  |
| Other             | 6 (5.0)     |
| BMI, mean (SD)    | 31.5 (8.6)  |
| Immune-compromised State, % | 21 (17.4) |
| Solid Tumor       | 11 (9.1)    |
| Hematologic Malignancy | 5 (4.1) |
| Charlson Comorbidity Index Score, mean (SD) | 4.8 (5.0) |

| Hospitalization during previous 6 mo, % | Yes | 57 (47.1) |
|----------------------------------------|-----|-----------|
|                                       | No  | 64 (52.9) |
| ICU status at the time of e-consult, % | Yes | 13 (10.7) |
|                                       | No  | 108 (89.3) |

*Immunosuppressive agents include: Apremilast, Dasatinib, Etanercept, Remicade, Rituximab, and Prednisone >10 mg/day

Figure 1. Variety of ID Diagnoses made by e-consults

Table 2. Outcomes

| Length of stay, mean (SD), d | 11 (9) |
|------------------------------|-------|
| Disposition, %               | 7 (8) |
| Home                         | 59 (48.7) |
| Left against medical advice  | 7 (5.8) |
| Hospital transfer            | 3 (2.5) |
| Index stay mortality         | 4 (3.3) |
| Death within 30 d of ID e-consult | 5 (4.1) |
| Readmission within 30 d related to initial ID e-consult | 31 (25.6) |

*Immunosuppressive agents include: Apremilast, Dasatinib, Etanercept, Remicade, Rituximab, and Prednisone >10 mg/day
Conclusion. We believe that this is the first report of the implementation of ID e-consults at a tertiary care hospital. Morality rates appear to be comparable to in-person ID care. In the absence of in-person ID physicians, ID e-consults can be a reasonable substitute. Further study is required to compare performance of ID e-consults to in-person ID consults.

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597. The Impact of COVID-19 on Outpatient Intravenous Antimicrobial Therapy (OPAT) in Physician Office Infusion Centers (POICs)

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Session: P-27. Clinical Practice Issues

Background. The coronavirus disease 2019 (COVID-19) pandemic dramatically affected the provision of healthcare in the U.S. with sharp declines in routine and elective healthcare services. Outpatient clinic visits declined nearly 60% in the early pandemic. We investigated how COVID-19 impacted the provision of OPAT at various Infectious Disease (ID) POICs nationwide.

Methods. Patient (pt) records were evaluated from Jan 2019 – July 2019 and compared to Jan 2020 – July 2020. Data collected included new OPAT pts, demographics, infection type, location prior to OPAT and therapy characteristics. Statistical analysis was performed using Chi-square test with p<0.05 considered statistically significant.

Results. Fourteen POICs reported data with a total of 2410 new OPAT pts in 2019 and 1807 in 2020, representing a decrease of 25%. Table 1 shows the comparison of OPAT characteristics between 2019 and 2020. Mean age and gender were similar, but there was a significantly higher percentage of pts <65 years treated in 2020 (43% vs. 36%, p<0.001). Infection type and location prior to OPAT were consistent between 2019 and 2020. Primary antimicrobial use was comparable with the exception of a slight increase in MDR was noted from 2018 to 2020, this was not significant (Figure 1). Although more ESBL- and MDR were noted, this was not significant. Overall length of therapy was comparable.

Table 1. Frequency of ESBL and MDR by Location prior to OPAT

Conclusion. OPAT provided through ID POICs experienced a substantial decrease in pts treated during the first half of 2020 compared to 2019. This was expected with the decline in healthcare services, especially elective procedures. Most pt and treatment characteristics were comparable between years, but interestingly, more elderly received OPAT during the pandemic and fewer completed therapy as planned. Further analysis of these differences can help determine effects of the pandemic on overall health outcomes in the OPAT population.

Table 1. Frequency of ESBL and MDR by Location prior to OPAT

| Year | ESBL | MDR |
|------|------|------|
| 2019 | 38%  | 38%  |
| 2020 | 40%  | 36%  |

Figure 2. Prevalence of ESBL producers and MDR Pathogens by Year

| Year | ESBL Producers | MDR Producers |
|------|---------------|---------------|
| 2018 | 20%           | 20%           |
| 2019 | 18%           | 18%           |
| 2020 | 22%           | 22%           |

- *p = 0.02*