were not predictive for a prolonged duration of NV GE in SOT patients. Interestingly, a reduction of the immunosuppression (IS) in SOT patients (dose reduction or drug termination) was associated with a prolonged duration of symptoms (median 47 vs. 14 days; Figure 3, \( P = 0.0007 \)).

**Conclusion.** In this series of patients, IS was associated with a prolonged duration of NV GE. A reduction of the immunosuppression was associated with a prolonged disease duration in SOT patients. It remains unclear whether this observation is due to a selection bias, or aggravation of symptoms were caused by immune reconstitution with reduced immunosuppressive therapy.

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1899. The Cellular Kinase Inhibitor OSU-03012 Inhibits Enterovirus 71 In Vitro
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**Session:** 224. Antiviral Therapies
**Saturday, October 6, 2018: 12:30 PM**

**Background.** Enterovirus 71 (EV-71) is a nonenveloped, single-stranded positive-sense RNA virus belonging to genus Enterovirus, family Picornaviridae. EV-71 has caused recurrent outbreaks of hand, foot, and mouth disease especially among children in Asia. Some patients develop severe complications, such as meningitis, encephalitis, poliomyelitis-like paralysis, myocarditis, and pulmonary edema. There are currently limited treatment options for EV-71 infection. OSU-03012 is a celecoxib derivative cellular kinase inhibitor with no inhibiting activity on cyclooxygenase that has antiviral activities against a broad-spectrum of viruses, including flaviviruses, filoviruses, and arenaviruses.

**Methods.** Two clinical isolates of EV-71 obtained from patients with laboratory-confirmed EV-71 infections were included in the study. We evaluated the in vitro anti-EV-71 activity of OSU-03012, using virus yield reduction assays (by quantitative reverse transcription-polymerase chain reaction), cell protection assay; and plaque reduction assay in multiple cell lines.

**Results.** OSU-03012 inhibited both EV-71 strains in U251 (neuronal) and RD (rhabdomyosarcoma) cells. The half maximal inhibitory concentration \((IC_{50})\) of OSU-03012 against EV-71 was consistently \(<2 \mu M\) in these cell lines in the virus yield reduction assay. At \(2 \mu M\) of OSU-03012, there was a nearly 2-log reduction in viral load in both U251 and RD cells. There was a dose-dependent increase in the percentage of viable cells after the addition of 0 to 2 \(\mu M\) of OSU-03012 in EV-71-infected U251 and RD cells in the cell protection assay. In the plaque reduction assay, there was \(<70\%\) reduction in plaque numbers with the addition of 2 \(\mu M\) of OSU-03012.

**Conclusion.** OSU-03012 exhibits anti-EV-71 activity in vitro. The treatment effects of OSU-03012 should be further evaluated in representative animal models of severe EV-71 infection to provide further data for potential clinical evaluation in the future.

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1900. Low Prevalence of Protective Antibodies to Measles Among Young Adults in Argentina
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**Background.** In the last years, there has been an increase in incidence of cases of measles in high and middle-income countries. In Argentina, measles elimination was achieved in 2000, with no circulation of measles virus since then (three doses MMR vaccine) and coverage is reported to be roughly 85%. The aim of this study was to determine seroprevalence of antibodies to measles in adults, analyzed according to HIV status.

**Methods.** Cross-sectional study. All serologic tests requested for measles antibodies in patients aged >18 years between January 2015 and December 2017 in an Infectious Diseases Reference Center in Buenos Aires were retrieved and analyzed according to HIV status.

**Results.** We included 2,663 patients with determinations for measles performed in the mentioned period. Of those, 348 were HIV(\(^+\)), with mean \(\pm SD\) age: 34.7(\pm 6.2) years, 85\% male (86\% MSM), mean \(\pm SD\) nadir CD4 (cells/mm\(^3\)): 369.6(\pm 219.5); 89\% VL<50 copies/mL, and 2,315 were HIV(\(-\)), with mean (\pm SD) age: 31(\pm 5.9) years, 67\% female. There was a high proportion of seronegative subjects to measles in both groups, but significantly higher in HIV(\(+\)) patients (40.8\% vs. 33.2\%; \( P = 0.005\)). However, when analyzed by age group, in those <40 years the proportion of seronegativity to measles was higher (HIV(\(+\)): 45.3\% vs. 31.3\%, \( P = 0.02\); HIV(\(-\)): 38.3\% vs. 20.2\%, \( P < 0.001\); Figure 1). Patients older than 50 years (the most prone to having been exposed to measles virus) had the highest prevalence of measles antibodies (>92% in both groups; Figure 2); and those younger than 40, the lowest (55% in HIV(\(+\)) and 62% in HIV(\(-\))).

**Conclusion.** Stratifiction by gender did not change any of these findings. In HIV(\(+\)) persons, seronegativity to measles was not associated with nadir of CD4 <200 (\(P = NS\)).

**Disclosures.** We found a very high proportion of subjects without protective antibodies to measles among those <40 years (higher in HIV(\(+\)) patients). This is interesting since in Argentina should have been a vast majority of people <40 who were not vaccinated at least once. Lack of circulation of measles might accelerate waning of antibodies. There might be an increased risk of measles in young people, especially in HIV(\(+\)) persons; measures to evaluate this situation and eventually (re)vaccinate susceptible persons is warranted.
Enterovirus D68 Associated Acute Flaccid Myelitis: A Retrospective Multicenter Study

**Background.** The safety, tolerability, and efficacy of Fluoxetine as an antiviral for AFM was studied.

**Methods.** A brief 6-item questionnaire was created using REDCap™ and distributed by email to all COG-approved BMT Centers. The initial email request was sent on March 26, 2018 to the BMT physician representative listed in the COG member roster. A follow-up request was sent on April 2, 2018. The questionnaire was emailed to 89 BMT centers and was completed at 57 centers.

**Results.** 56 patients with AFM from 12 centers met study criteria (Figure 1). Among 30 patients exposed to fluoxetine, no SAEs were reported and adverse effects were similar to controls (P = 0.16). The 28 patients treated with >1 dose of fluoxetine were more likely to have EV-D68 identified (57.1% vs. 14.3%, P = 0.001). Fluoxetine-treated patients had similar strength on initial examination compared with untreated controls (mean SLSS 12.9 vs. 14.3, P = 0.313) but more severe paralysis at nadir (mean SLSS 9.25 vs. 12.82, P = 0.023) and latest follow-up (mean SLSS 12.5 vs. 16.4, P = 0.005) (Figure 2). In propensity-adjusted analysis, SLSS from initial examination to latest follow-up decreased by 0.2 (95% CI: −1.8 to +1.4) in fluoxetine-treated patients and increased by 2.9 (95% CI: +0.7 to +4.4) in controls (P = 0.015).

**Conclusion.** Fluoxetine was safely administered and relatively well-tolerated. Patients with AFM treated with fluoxetine were more likely to have EV-D68-associated disease and had more severe paralysis at nadir and poorer long-term outcomes. These data do not suggest a positive efficacy signal for fluoxetine as a potential antiviral therapy for AFM.

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**1902. A Survey of Pediatric Bone Marrow Transplant Centers Regarding Local Cytomegalovirus Prophylaxis Management Practices and Interest in a Future Randomized Trial**

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**Background.** Cytomegalovirus (CMV) is a major source of morbidity and mortality after hematopoietic cell transplantation (HCT). A recent adult trial comparing leronlimab to placebo, found this agent to be efficacious in preventing CMV reactivation with limited toxicity. Additional investigation of leronlimab in pediatric HCT recipients is needed. To inform the feasibility of a pediatric trial, we surveyed bone marrow transplant (BMT) centers registered with the Children's Oncology Group (COG) regarding their CMV management practices and interest in a pediatric trial for CMV prevention.

**Methods.** A brief 6-item questionnaire was created using REDCap™ and distributed by email to all COG-approved BMT Centers. The initial email request was sent on March 26, 2018 to the BMT physician representative listed in the COG member roster. A follow-up request was sent on April 2, 2018. The questionnaire requested information about CMV prophylaxis strategies, including antiviral agent(s) employed, and interest in a future pediatric trial.

**Results.** Of these, 23 (40%) reported giving prophylaxis to all or a subset of allogeneic/haploidentical HCT recipients. The most common indication for CMV prophylaxis (21/23) at the discretion of treating providers with data gathered retrospectively. The primary outcome was summative limb strength score (SLSS; sum of Medical Research Council strength in all four limbs).

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