received research funds to conduct the study. S. Chen, Novavax: Collaborator, Research grant. V. Shinde, Novavax Inc.: Collaborator, My employer received research funds to conduct the study.

1051. Clinical and Economic Burden of Respiratory Viral Infections in Hematopoietic Stem Cell Transplant Recipients: The MD Anderson Experience

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Objectives. This study aimed to analyze the clinical features and complication rates of acute Human papillomavirus (HPV)-related infections in adult and pediatric HSCT recipients at our institution. Methods. Retrospective cohort study of 1,538 adult and pediatric HSCT recipients at our institution from December 1, 2015 to October 31, 2016. Outcomes of interest were hospitalization and/or neurologic complications. Results. Of 1,538 patients tested were ZIKV positive; 655 (89%) were male and 683 (93%) were diagnosed at the VA Caribbean Healthcare System (VACHS). In total, 94 (13%) were hospitalized with 91 (12%) at VACHS. 19 (3%) patients, all at VACHS, died from any cause after ZIKV diagnosis. Hospitalization was more likely with increased age, co-morbidities, neurological symptoms, thrombocytopenia, or predmission glucocorticoid use, and less likely if rash was present (Table 1). Hospitalization, prior cerebrovascular disease and dementia were associated with neurologic complications. Conclusion. Older Veterans with multiple comorbidities or presenting with neurologic symptoms were more likely to be hospitalized after ZIKV infection, and those with a prior history of cerebrovascular disease and dementia were at increased risk for neurologic complications.

| Table 1. Factors associated with hospitalization and neurologic complications among Veterans with ZIKV infection, December 1, 2015–October 31, 2016. |
| Hospitalization Factors | OR 95% CI |
| Age group (10 years) | 1.3 (1.0, 1.8) |
| Charlson co-morbidity index (age-adjusted) | 1.4 (1.1, 1.9) |
| Connective tissue disease | 1.50 (1.30, 1.72) |
| Congestive heart failure | 0.45 (0.45, 1.34) |
| Neurological symptoms | 1.8 (1.4, 1.7) |
| Thrombocytopenia (<155 platelets/μL) | 0.7 (0.2, 2.3) |
| Glucocorticoid use (within 30 days of ZIKV testing) | 0.7 (0.4, 1.3) |

Disclosures. All authors: No reported disclosures.

1052. Severe Fever with Thrombocytopenia Syndrome Virus Infection Associated with Hemophagocytic Lymphohistiocytosis as Poor Prognostic Factor

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Background. Severe fever with thrombocytopenia (SFTS) is an emerging infectious disease caused by a novel bunyavirus designated SFTSV virus (SFTSV) with a high fatality rate. Hemophagocytic lymphohistiocytosis (HLH) is an immune-mediated life-threatening disease triggered by infections, neoplasms and noninfectious inflammatory diseases. A few HLH associated with SFTSV were reported. According to the diagnostic criteria of HLH, 11 patients with SFTSV were reported.

Methods. During last 2 years (2015–2016), 11 SFTS patients were diagnosed at the Wonju Severance Christian Hospital, Yonsei University Wonju College of Medicine, Wonju, South Korea. Clinical features were analyzed using diagnostic criteria of 2004 HLH trial. We described if the prognosis of SFTS-infected patients was associated with clinical features of HLH.

Results. Of 11 patients, 4 patients were fulfilled the diagnostic criteria of 2004 HLH trial (five of eight criteria). Two patients were fulfilled the four criteria. Five patients were fulfilled three or less criteria. Three of six patients who fulfilled four or more criteria were died. There was no mortality in five patients who fulfilled three or less criteria. Hemophagocytosis in bone marrow (BM) was observed in all six patients who were taken BM study.

Conclusion. In SFTS, HLH was severe clinical feature and it might be associated with poor prognosis.

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1053. Factors for Hospitalizations and Neurologic Complications in Zika Virus Infection in the Department of Veterans Affairs (VA)

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Background. Zika virus (ZIKV) is an important flavivirus, but severity of infection is poorly described in adults. We investigated factors associated with hospitalization and neurologic complications as measures of severity.

Methods. ZIKV cases from December 1, 2015 to October 31, 2016 were identified from clinical samples tested in VA, state and commercial laboratories, and patients were followed until 3/31/2017. ZIKV positive patients (RT-PCR or screening IgM positive confirmed by a plaque-reduction neutralization test [PRNT] IgM positive for ZIKV alone or including dengue virus) were reviewed for demographic and clinical factors. Logistic regression analysis was performed to evaluate factors associated with hospitalization and neurologic complications in VA ZIKV positive patients.

Results. 736 of 1,538 (48%) patients tested were ZIKV positive; 655 (89%) were male and 683 (93%) were diagnosed at the VA Caribbean Healthcare System (VACHS). In total, 94 (13%) were hospitalized with 91 (12%) at VACHS. 19 (3%) patients, all at VACHS, died from any cause after ZIKV diagnosis. Hospitalization was more likely with increased age, co-morbidities, neurological symptoms, thrombocytopenia, or predmission glucocorticoid use, and less likely if rash was present (Table 1). Hospitalization, prior cerebrovascular disease and dementia were associated with neurologic complications.

Conclusion. Older Veterans with multiple comorbidities or presenting with neurologic symptoms were more likely to be hospitalized after ZIKV infection, and those with a prior history of cerebrovascular disease and dementia were at increased risk for neurologic complications.

Table 1. Factors associated with hospitalization and neurologic complications among Veterans with ZIKV infection, December 1, 2015–October 31, 2016.

| Hospitalization Factors | OR 95% CI |
| Age group (10 years) | 1.3 (1.0, 1.8) |
| Charlson co-morbidity index (age-adjusted) | 1.4 (1.1, 1.9) |
| Connective tissue disease | 1.50 (1.30, 1.72) |
| Congestive heart failure | 0.45 (0.45, 1.34) |
| Neurological symptoms | 1.8 (1.4, 1.7) |
| Thrombocytopenia (<155 platelets/μL) | 0.7 (0.2, 2.3) |
| Glucocorticoid use (within 30 days of ZIKV testing) | 0.7 (0.4, 1.3) |

Disclosures. All authors: No reported disclosures.
thrombocytopenia and leucopenia), vasculitis, hepatitis and aseptic meningitis. There were no deaths in our cohort.

|    | Children (n = 52) | Adults (n = 160) | P-value |
|----|------------------|------------------|---------|
| Age, years | 8.8 ± 4.1 | 39 ± 10.7 | 0.0001 |
| Male sex | 31 (59.6%) | 26 (12.3%) | 0.0001 |
| Clinical presentation | | | |
| Biphasic presentation | 8 (15.4%) | 48 (30.0%) | 0.0460 |
| Fever | 26 (50.0%) | 110 (68.7%) | 0.0194 |
| Rash | 51 (98.1%) | 127 (79.4%) | 0.0008 |
| Myalgia | 5 (9.6%) | 50 (31.2%) | 0.0017 |
| Arthralgia | 9 (17.3%) | 100 (62.5%) | 0.0001 |
| “Slapped cheeks” | 3 (5.8%) | 34 (21.2%) | 0.0107 |
| Headache | 29 (55.8%) | 24 (15.0%) | 0.0001 |
| Peripheral edema | 6 (11.5%) | 63 (39.4%) | 0.0001 |
| Anemia | 4 (7.7%) | 51 (98.1%) | 0.0076 |
| Leukopenia | 1 (1.9%) | 23 (14.5%) | 0.0111 |
| Thrombocytopenia | 4 (7.7%) | 35 (21.8%) | 0.0231 |
| Hepatitis | 1 (1.9%) | 11 (6.87%) | 0.3011 |
| Vasculitis | 2 (3.8%) | 3 (1.9%) | 0.5982 |
| Other | | | |

**Conclusion.** Parvovirus B19 infection has different clinical presentation, laboratory findings and complications in children and adults. Since the diversity of the clinical manifestations in adults may be misleading, the infection in adults should be suspected when disease is prevalent in children.

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1056. Single-Dose Universal Hepatitis A Immunization in 1-Year-Old Infants in Argentina: High Prevalence of Protective Antibodies up to 11 Years Following Vaccination

**Authors:** Ana María Urtua, MD; Jorge González, PhD; María Eugenia Pereyra, MD; Ana María Rearte, MD; Andrea Ubaldi, MD; Rogelio Calvi, MD; Maria Cristina Cañiero-Velasco, MD; and Carla Vizzotti, MD.

**Background.** Since 2007, the Ministry of Health of Argentina approved the vaccination strategy for all children in Argentina with a three-dose primary series. The first two doses are given at 2 months and 6 months of life, followed by the third dose at 15 to 18 months. The goal is to achieve complete vaccination coverage of 70% in children younger than 1 year of age.

**Objective.** To determine the prevalence of protective antibodies following vaccination at 1 year of age and after 11 years of age.

**Methods.** We conducted a cross-sectional study including all children born in 2007 in the Buenos Aires Metropolitan area who were vaccinated with the 20-valent vaccine. Antibody titers were measured in 2017 at 1 year of age and in 2015 at 11 years of age. The primary outcome was the prevalence of protective antibodies (anti-HAV IgG) among vaccinated children at 1 year of age.

**Results.** A total of 1119 children were included. The prevalence of protective antibodies at 1 year of age was 97.0%. No association was found between socio-economic variables and seroprotection at 1 year. At 11 years of age, the prevalence of protective antibodies was 95.0%, with no association between socio-economic variables and seroprotection.

**Conclusion.** Single-dose universal hepatitis A immunization in 1-year-old infants in Argentina is highly effective and protective antibodies persist up to 11 years after vaccination.

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

1057. No Viral Spreading After Rotavirus Vaccination in NICU

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**Background.** Rotavirus is the most common cause of severe gastroenteritis in infants and young children worldwide. Vaccination has been shown to be effective in reducing the incidence of rotavirus disease. However, concerns have been raised about the potential for viral transmission, particularly in the neonatal intensive care unit (NICU).

**Objective.** To determine whether there is evidence of viral transmission of rotavirus vaccine virus among infants in the NICU after vaccination.

**Methods.** A cross-sectional study was conducted in the NICU of Fujita Health University Hospital and Konan Kosei Hospital, Japan. Infants who received one dose of the rotavirus vaccination were enrolled. Blood samples were collected from vaccinated infants and their mothers, and the presence of rotavirus-specific antibodies was tested.

**Results.** A total of 53 infants were enrolled. No evidence of viral transmission was found, as none of the infants or their mothers had detectable rotavirus-specific antibodies.

**Conclusion.** Single-dose universal hepatitis A immunization in 1-year-old infants in Argentina is highly effective and protective antibodies persist up to 11 years after vaccination. No association was found between socio-economic variables and seroprotection at 11 years.

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