Adenovirus can cause multi-organ dysfunction in hematopoietic stem cell transplant recipients (SCTr). It accounts for 22% of infection-associated mortality. We used a Cox proportional hazards (CPH) regression model to compare the hazard of ADVd between SCTr differing by absence or presence of antiviral therapy (cidofovir, brincidofovir or both).

**Conclusion.** Subjects with single end organ disease had earlier resolution of ADVd compared to other SCTr. Contrary to previous reports studying ADV-DNаемia, our study noted an earlier resolution of ADVd in the absence of antiviral therapy.

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

1414. The utility of respiratory viral panel testing for nosocomial fever in the neonatal intensive care unit

**Background.** Patients in the neonatal intensive care unit (NICU) often develop fever to varying degrees among their patients. Many neonates empirically start on antibiotics due to their fragile clinical status. We sought to evaluate whether the respiratory viral panel (RVP) PCR test is associated with use of antibiotics in patients who develop fever in the NICU.

**Methods.** We conducted a retrospective chart review on patients admitted to the Level 4 NICU of the University of Maryland Medical Center from November 2015 to June 2018. We included all neonates who developed a fever 48 hours into their admission. We collected demographic information and data on length of stay, fever work-up and diagnostics (including labs, cultures, RVP), and antibiotic use. Descriptive statistics, Fisher exact test, linear regression, and Welch ANOVA were performed.

**Results.** Among 347 fever episodes, the mean age of neonates was 72.8 ± 21.6 days, and 45.2% were female. Out of 30 total RVP samples analyzed, 2 were positive (6.7%). The most common causes of fever were post-procedural (5.7%), pneumonia (4.8%), urinary tract infection (3.5%), meningitis (2.6%), bacteremia (2.3%), or due to a viral infection (2.0%). Antibiotics were started in 208 patients (60%), while 61 neonates (17.6%) were already on antibiotics. The mean length of antibiotics was 7.5 ± 0.5 days. Neonates were more likely to get started on antibiotics if they had a negative RVP compared to those without a negative RVP (89% vs. 11%, p-value < 0.0001). Patients with a positive RVP had a decreased length of stay compared to those with a positive RVP (30.3 ± 8.7 vs. 56.8 ± 71.3, p-value 0.01). On multivariate linear regression, a positive RVP was not associated with length of stay.

**Conclusion.** Neonates with a negative respiratory viral PCR test were more likely to be started on antibiotics for fevers. Respiratory viral panel testing can be used as a tool to promote antibiotic stewardship in the NICU.

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

1413. Trends in Risk of Respiratory Syncytial Virus Hospitalizations in Preterm Infants Over a 10-Year Period

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**Background.** The American Academy of Pediatrics (AAP) recommended respiratory syncytial virus (RSV) immunoprophylaxis (RSV-IP) to reduce the risk of severe RSV hospitalization (RSVH) for certain infants < 35 weeks gestational age (wGA) until 2014, when the AAP no longer recommended use among infants born > 29 wGA without other medical conditions. Studies have shown that RSV-IP utilization subsequently decreased among these infants, as well as infants born < 29 wGA from whom RSV-IP is still currently recommended. We described RSVH rates among preterm (PT) infants < 35 wGA compared to term infants from 2008-2019.

**Methods.** We identified infants born between 7/1/2008 and 7/30/2019 in the MarketScan® Commercial and Multi-State Medicaid claims databases. Infants with a code for birth at < 35 wGA were classified by wGA. Those with a code for full-term without major health problems were classified as term. Infants contributed follow-up time during the RSV season (November to March) while < 6 months old, summarized as infant-seasons (days of follow-up during the RSV season divided by 151 [number of days in an RSV season]) (Table 1). Using diagnoses codes, we identified RSVH during each RSV season for infants < 6 months. Unadjusted rate ratios comparing PT to term infants were calculated to account for seasonal variation in virus circulation.

**Number of Infants and Follow-up Time**

**Results.** The number of infants contributing time at < 6 months old during the RSV season and their follow-up time are shown in Table 1. There were 796 RSVH among Commercial PT infants, 6,486 RSVH among Commercial term infants, 2,501 RSVH among Medicaid PT infants, and 13,962 RSVH among Medicaid term infants during the 10 seasons in the database. RSVH rates for PT infants tended to increase over time, with the exception of the 2009-2010 season for Medicaid infants (Table 2). Rate ratio comparing PT to term infants also increased after the 2014 guidance change (Figure 1 and 2). The risk of 29-34 wGA infants compared to term infants approximately doubled in the 5 years after the guidance change (Table 2).

**Conclusion:** This is the first pediatric cohort study to report risk factors and clinical outcomes of ADVd, irrespective of ADV-DNAemia. UCTr recipients have a higher hazard of ADVd compared to other SCTr. Contrary to previous reports studying ADV-DNAemia, our study noted an earlier resolution of ADVd in the absence of antiviral therapy.

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