intravenous immunoglobulin; WBC: white blood cell count; ANC: absolute neutrophil count; ALC: absolute lymphocyte count.

Table 2. Characteristics of the 113 Infections in the 35 Subjects Who Developed Infections

| Total Infections by Category* | N | 113 Total Infections |
|------------------------------|---|----------------------|
| **Bacterial** (Total N, % infections) | 77 (68.1) |
| Gram positive (N, % proven bacterial) | 12 (36.3) |
| Gram negative (N, % proven bacterial) | 19 (55.9) |
| Other (N, % proven bacterial) | 3 (8.6) |
| **Proven bacterial infections by body site** | |
| Pulmonary (N, % proven bacterial) | 19 (55.9) |
| Urinary (N, % proven bacterial) | 17 (50.0) |
| Sinus (N, % proven bacterial) | 14 (41.2) |
| Other (N, % proven bacterial) | 27 (39.1) |
| **Probable bacterial infectiona** | 43 |
| **Viral** (Total N, % infections) | 27 (23.9) |
| Proven viral infections | 20 |
| Non-respiratory viral (N, % proven viral) | 5 (25.0) |
| Respiratory viral (N, % proven viral) | 15 (75.0) |
| **Proven viral infections by body site** | |
| Pulmonary (N, % proven viral) | 22 (81.5) |
| Urinary (N, % proven viral) | 0 (0) |
| Skin (N, % proven viral) | 1 (3.7) |
| Other (N, % proven viral) | 4 (14.8) |
| **Probable viral infections** | 7 |
| **Fungal** (Total N, % infections) | 9 (8.0) |

*Percentages may be greater than 100% as more than one infection can be identified in each category.

**Conclusion.** Infectious complications, particularly of bacterial etiology, are common in the first year following CAR-T therapy. These data may inform future prophylactic strategies in this patient population.

**Disclosures.** Matthew Frigault, MD, Arcellx (Consultant); BMS (Consultant); Iovance (Consultant); Kite (Consultant); Novartis (Consultant) Jay A. Fishman, MD, Nothing to disclose Jon Arnason, MD, BMS/Juno (Advisor or Review Panel member); Regeneron (Advisor or Review Panel member)

926. COVID-19 Infections After SARS-CoV-2 Vaccination in Solid Organ Transplant Recipients

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**Session:** P-33: Infections in Immunocompromised Individuals

**Background.** Solid organ transplant recipients (SOTR) have lower humoral responses following SARS-CoV-2 vaccination. Whether this equates to reduced vaccine effectiveness in SOTR or impacts disease severity is not yet known. We used the IDSA Emerging Infections Network (EIN) to identify SARS-CoV-2 cases in vaccinated SOTR. We describe their clinical characteristics and outcomes.

**Methods.** On 4/7/21, we requested case reports via the EIN listserv of COVID-19 infections following SARS-CoV-2 vaccination. Whether this equates to reduced vaccine effectiveness within this vulnerable population. We did not appreciate any correlation between time from vaccination and COVID-19 disease severity or outcome. Further studies evaluating the true incidence of and risk factors for breakthrough infections among vaccinated SOTR are needed.

**Disclosures.** Matthew Kuehnert, M.D., American Association of Tissue Banks (Board Member); ICCBBA (Board Member); Musculoskeletal Transplant Foundation (Employer) John W. Baddley, M.D., Eli Lilly (Consultant); Pfizer (Consultant); R-Pharm (Consultant); Via Bia (Consultant)

927. Clinical Characteristics and Outcomes of Norovirus Infection in Patients with Hematologic Malignancies: A Retrospective, Single Center Study

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**Characteristics**

| Characteristics | N=34 (%) |
|----------------|---------|
| **Gender** | |
| Female | 13 (38%) |
| Male | 10 (29%) |
| Unknown | 11 (32%) |
| **Age Group** | |
| 18-44 | 4 (12%) |
| 45-64 | 10 (29%) |
| 65-74 | 14 (41%) |
| 75-84 | 5 (15%) |
| Unknown | 1 (3%) |
| **Vaccine Administered** | |
| Pfizer/BioNTech | 21 (62%) |
| Moderna | 10 (29%) |
| Janssen | 1 (3%) |
| Unknown | 2 (6%) |
| **Completed Vaccine Series** | |
| Yes | 27 (79%) |
| No | 2 (6%) |
| Unknown | 5 (15%) |
| **Organ Transplanted** | |
| Lung | 10 (29%) |
| Heart | 7 (21%) |
| Kidney | 12 (35%) |
| Liver | 1 (3%) |
| Dual | 4 (12%) |
| **Time from Transplant to COVID-19 Infection** | |
| < 1 year | 3 (9%) |
| 1-5 years | 15 (44%) |
| >5 years | 13 (38%) |
| Unknown | 3 (9%) |
| **Disease Severity** | |
| Mild/Moderate | 11 (32%) |
| Severe | 11 (32%) |
| Critical | 12 (35%) |
| **Outcomes** | |
| Improving/Recovery | 20 (59%) |
| Died/Deteriorating | 9 (26%) |
| Unknown | 5 (15%) |

**Conclusion.** SARS-CoV-2 infections after vaccination are occurring in SOTR, including cases of critical illness, suggesting reduced vaccine effectiveness within this vulnerable population. We did not appreciate any correlation between time from vaccination and COVID-19 disease severity or outcome. Further studies evaluating the true incidence of and risk factors for breakthrough infections among vaccinated SOTR are needed.
**Session:** P-53. Infections in Immunocompromised Individuals

**Background.** Norovirus (NV) gastroenteritis has been identified as a cause of significant morbidity among hematopoietic stem cell transplant (HSCT) recipients, often with associated complications. Current guidelines recommend symptomatic relief with antiemetics, rehydration, and reduction in immune suppression. Nitzoxanide (NTZ) is an anti-parasitic agent but some literature suggests a benefit of nitzoxanide therapy for NV.

**Methods.** We conducted a single center, retrospective chart review study and evaluated adult patients (age > 18 years) who had NV infection and either: 1) underwent stem cell transplantation; or 2) received myeloablative chemotherapy within 4 weeks of NV infection by positive test on gastrointestinal pathogen panel during the time period from January 2015 through March 2020.

**Results.** 26 patients were reviewed. 14 patients (54%) had a history of HSCT prior to infection. Three patients (12%) received both myeloablative chemotherapy and HSCT within four weeks of NV infection. Six patients (46%) had autologous (46%) six had matched unrelated donor, and one (8%) had haploidentical allogeneic transplants. Nine (69%), three (23%), and one (8%) underwent myeloablative, reduced intensity and non-myeloablative conditioning, respectively. Median duration of diarrhea was 4.5 days (IQR = 2.5-7.7). Three (12%) patients received NTZ or intravenous immunoglobulin. The 6 month mortality was 42% (11/26), however, none of the deaths were directly attributable to NV infection.

**Conclusion.** NV infection led to severe diarrheal disease in our cohort. Overall mortality was high, and a trend toward increased mortality was seen among patients receiving NV-directed therapy; these patients likely received NV-directed therapy due to the severity of their illness. Clinicians must have a high suspicion for this illness and obtain PCR testing for timely diagnosis and management.

**Table 1. Characteristics of patients with hematologic malignancies and norovirus infection**

| Characteristics | Supportive care | NV-directed therapy |
|-----------------|-----------------|---------------------|
| Age at time of NV diagnosis, median [IQR] | 58 (41-65) | 69 (50-76) |
| Days from transplant, at the time of NV diagnosis, median [IQR] | 10 (4-26) | 0.5 |
| Female gender | 5 (33.3) | 1 (33.3) |
| Hodgkin’s lymphoma | 3 (18) | 0 (0) |
| Acute myeloid leukemia | 6 (20) | 0 (0) |
| B cell lymphoma | 3 (18) | 1 (33.3) |
| Multiple myeloma | 3 (18) | 0 (0) |
| Other | 4 (26) | 1 (33.3) |
| Myeloablative chemotherapy ≤2 weeks from NV infection | 14 (87.5) | 1 (33.3) |
| Autologous transplant | 6 (20) | 0 (0) |
| Allogeneic transplant | 5 (33.3) | 2 (66.7) |
| Matched unrelated | 4 (80) | 2 (100) |
| Hospitalized | 1 (10) | 0 (0) |
| Transplant conditioning | 3 (20) | 0 (0) |
| Myeloblastic | 8 (72.8) | 1 (100) |
| Median intensity | 3 (27.2) | 0 (0) |
| Non-myeloblastic | 9 (81.8) | 0.8 |
| ANC, median [IQR] | 2.05 (2.5-1.0) | 0.8 (1.6-9.3) |
| ALC, median [IQR] | 0.4 (0.2-1.3) | 0.2 |
| Patients with ≥1 infections | 7 (80.0) | 6 (60.0) |
| Days of documented diarrhea, median [IQR] | 4 (2-7) | 6 (7-17) |
| Length of stay, median [IQR] | 15 (9-26) | 3 (1-3) |

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

928. Clinical Characteristics and Microbiology Testing Patterns Among Transplant Recipients Admitted to Acute Care Hospitals for Suspected Infection

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**Session:** P-53. Infections in Immunocompromised Individuals

**Background.** Solid organ transplant (SOT) is a growing option for patients with end-stage organ diseases. Immunosuppressive therapy (IT) is utilized in this population to minimize risk of allograft rejection, which increases infection risk particularly of atypical pathogens that can complicate the infection-related diagnostic journey. The purpose of this analysis was to evaluate baseline clinical characteristics and microbiological test utilization patterns among a cohort of patients with a history of SOT and IT. Variation in clinical characteristics and microbiological testing patterns were observed across SOT categories.

**Methods.** This retrospective cohort study utilized a US hospital-based, ser-vicel-level database. Patients were selected from a subsample of database facilities utilizing plasma microbial cell-free DNA diagnostic assays. The study period was 1/1/2017-3/21/2020. Eligible patients were identified by 1st observation of SOT status and IT. Subsequent inpatient admissions for suspected infection were analyzed.

**Results.** We identified 749 patients with SOT history and use of IT, 56.4% were male, and the mean age was 52.8 (18.7) years. Kidney was the most prevalent transplant category (47.2%), followed by liver (17.6%), kidney-pancreas (11.1%), and lung (11.1%). Median time from transplantation to diagnosis of nocardiosis was 396 days (IQR: 154-1071). Most common sites of infection were lung (88.0%), skin (16.7%), brain (13.9%), and blood (47.2%), heart (17.6%), kidney-pancreas (11.1%), and lung (11.1%). Continuous variables were presented as mean or median with interquartile range (IQR).

**Table 2. Utilization of microbiological tests**

| Tests across the entire LOS | All | Liver | Lung | Kidney-pancreas | Heart |
|---------------------------|-----|-------|------|----------------|-------|
| Total micros | 8.1 (4.0-12.0) | 7.6 (4.0-12.0) | 8.4 (4.0-12.0) | 9.0 (4.0-12.0) | 8.1 (4.0-12.0) |
| Cultures | 3.0 (1.7-9.0) | 3.0 (1.7-9.0) | 3.0 (1.7-9.0) | 3.0 (1.7-9.0) | 3.0 (1.7-9.0) |
| Molecular | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) |
| Antigen tests | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) | 2.0 (1.5-2.5) |
| Other | 0.2 (0.1-0.3) | 0.2 (0.1-0.3) | 0.2 (0.1-0.3) | 0.2 (0.1-0.3) | 0.2 (0.1-0.3) |

**Conclusion.** This analysis suggests that the infection-related diagnostic journey improves with greater utilization among lung transplant recipients versus other SOT recipients. Variation in clinical characteristics and microbiological testing patterns were observed across SOT categories.

**Disclosures.** T Matthew Hill, PharmD, PhD, Karius, Inc (Employee, Shareholder) Erick R. Scott, MD, MHS; Karius, Inc (Employee, Shareholder) Sivan Bercovich, PhD, Karius Inc (Employee)

929. Recurrent Nocardiosis in Solid Organ Transplant Recipients: An Evaluation of Post-Treatment Prophylaxis

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**Session:** P-53. Infections in Immunocompromised Individuals

**Background.** Nocardia more commonly causes infection in immunocompromised individuals, notably with a relapse rate of approximately 5%. Solid organ transplant recipients will often receive post-treatment prophylaxis as the underlying immunosuppression is unable to be completely removed. However, data supporting this practice is sparse. We sought to evaluate recurrence of nocardiosis in solid organ transplant recipients, specifically evaluating the role of post-treatment prophylaxis.

**Methods.** We conducted a retrospective cohort study of solid organ transplant (SOT) recipients at our medical center diagnosed with nocardiosis from 2000 through 2020. We included adult SOT recipients who completed their course of Nocardia therapy. Patients were excluded if they had not yet completed therapy, died prior to completing therapy, or there was no post-therapy follow-up. The primary outcome was Nocardia recurrence. Continuous variables were presented as mean or median, as appropriate.

**Results.** 108 patients meeting inclusion criteria were analyzed. 72 (66.7%) were male and median age was 60 years (IQR 52-65). Most common SOT types were kidney (47.2%), heart (17.6%), kidney-pancreas (11.1%), and lung (11.1%). Median time from transplantation to diagnosis of nocardiosis was 396 days (IQR 154-1071). Most common sites of infection were lung (88.0%), skin (16.7%), brain (13.9%), and blood.