Conclusion: Stenotrphomonas bloodstream is a serious pathogen and hidden threat among pediatric cancer patients associated with high mortality rate.

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

2690. Infectious Complications in Adult Leukemic Patients with Prolonged Neutropenia Undergoing Induction Chemotherapy

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Session: 275. Transplant ID: Malignancy and Neutropenia
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Background: Induction chemotherapy in patients with the diagnosis of acute leukemia is associated with a high incidence of infectious complications. While prior studies provide information regarding infectious complications in this patient population, more research is needed to evaluate infection complications in a subgroup of leukemic patients with prolonged neutropenia who often require repeat induction chemotherapy.

Methods: This was a retrospective analysis of 61 patients ages 18–85, between January 1, 2010 and March 14, 2018 who were diagnosed and being treated for acute leukemia. All selected patients experienced severe neutropenia (defined as absolute neutrophil count <500/μL) for ≥7 days. 33 patients underwent their first induction chemotherapy while 28 patients underwent repeat induction chemotherapy. Patient characteristics and infectious complications were examined. Analysis was performed to further study blood stream infections in this patient population.

Results: Sixty-one patients, mean age of 55 ± 17, were included in this study. Acute myelogenous leukemia was the most common diagnosis (n = 47, 77%). The average duration of neutropenia in single vs multiple induction group was 40 vs. 47.2 days (P = 0.38), respectively. 198 culture-proven infections were identified. Overall, bloodstream infections were the most common site (n = 78, 39.4%), followed by respiratory tract infections (n = 39, 19.7%). Gram-positive organisms were the leading etiology of bacteremias (n = 50, 64%). Bacteremia episodes were more common in the patients undergoing multiple induction chemotherapy comparing to a single treatment (45 vs. 33 episodes). Patients undergoing multiple induction chemotherapy experienced a higher rate of Gram-negative blood stream infection episodes comparing to a single induction group (n = 18/78, 23.1% vs. n = 10/78, 12.8%).

Conclusion: Overall, bacteremia was the most common infection in this patient population, followed by respiratory tract infections. Gram-positive pathogens were the most common etiology of bacteremia when all patients were analyzed. However, in the subset of patients undergoing multiple induction chemotherapy, Gram-negative pathogens were the leading cause of the blood-stream infections.

Table 1. All patient characteristics included in the study

Table 1. Patient Characteristics		
Characteristic	**Number (n)**	**Percent (%)**
Age (years) mean ± SD	55 ± 17	
Gender		
Male	34	56%
Female	27	44%
Total	61	
Induction		
Single	33	54%
Multiple	28	46%
Disease		
Acute Myeloid Leukemia	47	77%
Acute Lymphocytic Leukemia	8	13%
Myelodysplastic Syndrome	2	3%
Myeloid Sarcoma	2	3%
Chronic Lymphocytic Leukemia	1	2%
Chronic Myelomonocytic Leukemia	1	2%

Figure 1. Comparison of infectious complications in single induction versus multiple induction chemotherapy groups

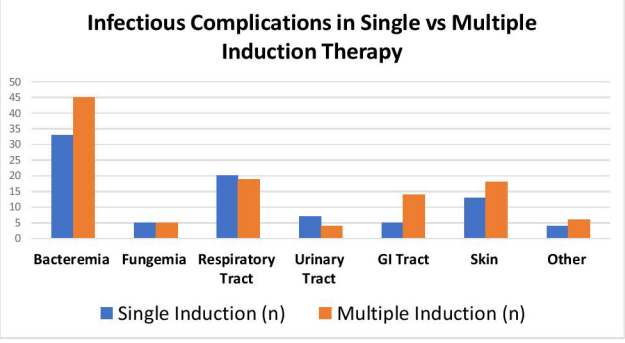
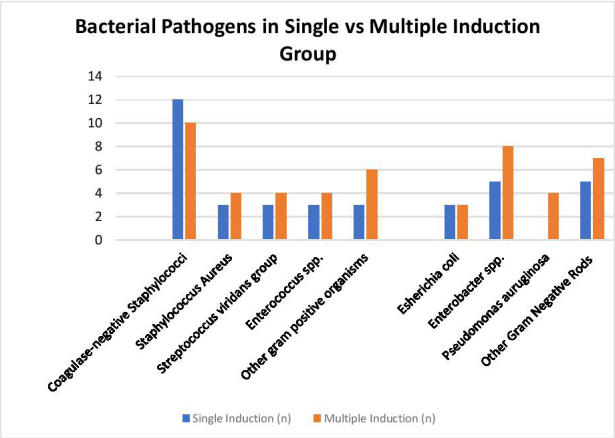


Table 2. Pathogens of bacteremia isolated in patients with bacteremia in single induction versus multiple induction groups

Pathogens of bacteremia	Single Induction Group (n)	Repeat Induction Group(n)
Gram negative pathogens	**10**	**18**
Escherichia coli	3	3
ESBL[1]		1
Klebsiella spp.	0	2
Morganella morganii	1	
Enterobacter cloacae	2	3
KPC[2]	1	1
Pseudomonas aeruginosa	0	5
Achromobacter xylosoxidans	2	2
Acinetobacter baumannii	1	1
Stenotrophomonas maltophilia	1	1
Serratia marcescens	0	1
Gram positive pathogens	**23**	**27**
Streptococcus viridans group	3	4
Granulicatella adiacens	1	0
Rothia spp	0	1
Enterococcus faecium	3	1
VRE[3]	2	1
Enterococcus faecalis	0	3
Staphylococcus aureus	3	4
MSSA[4]	1	1
MRSA[5]	2	3
Coagulase-negative Staphylococci	12	10
Staphylococcus epidermidis	8	9
Staphylococcus hominis	2	1
Staphylococcus haemolyticus	2	0
Clostridium ramosum	1	
Other	0	4
Streptomyces spp		1
Actinomyces spp		1
Micrococcus spp		1
Brevibacterium spp		1

1. ESBL- Extended-spectrum beta-lactamase
2. KPC- Klebsiella pneumoniae carbapenemase
3. VRE- Vancomycin Resistant Enterococcus
4. MSSA- Methicillin Susceptible Staphylococcus aureus
5. MRSA- Methicillin Resistant Staphylococcus aureus

Figure 2. Comparison of selected bacterial pathogens isolated in single versus multiple induction therapy groups



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

2691. Comparison of Incidence and Mortality of Kaposi's Sarcoma Amongst Solid-Organ Transplant Recipients

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Background: Kaposi's sarcoma (KS) is a lymphatic endothelium-derived tumor caused by Human Herpes Virus 8 (HHV-8). Organ transplant recipients are at increased risk of this malignancy due to use of immunosuppressive therapy. In this

observational trial, the incidence of KS in different organ transplant recipients as well as mortality were investigated.

Methods: Patient information was retrieved from the United Network for Organ Sharing (UNOS) database to identify all liver, kidney, heart, or lung transplant recipients, and those who were subsequently diagnosed with KS. Patients were stratified by transplant organ, clinical and demographic information was obtained to characterize each population. Unadjusted differences in incidence, mortality, and patient characteristics were examined with chi-square or Fisher exact test for categorical variables; continuous variables were examined with the Kruskal–Wallis test which was Bonferroni adjusted for multiple comparisons. Patients < 18 years of age, who had missing information concerning the development of a Kaposi's sarcoma, or who underwent multiple organ transplant were excluded. SAS, v. 9.4, was used for statistical analysis; $P < 0.05$ was considered significant.

Results: Patient demographics are described in Table 1. The development of KS was significantly different among organ transplant types. Kidney transplant recipients had a higher incidence of KS in comparison to liver transplant recipients ($P < 0.001$). Mortality was the highest in lung transplant recipients who developed KS, which was significantly higher than kidney ($P < 0.001$) or liver transplant recipients ($P = 0.005$). Finally, it was determined that there was a significant difference in age and race (white vs. non-white) among the various organ transplants ($P < 0.001$, respectively)

Conclusion: Although incidence of KS is significantly higher post renal transplant, mortality is highest in lung transplant recipients. Further investigation is needed to understand differences in mortality among transplant recipients. This will help identify at risk subjects and develop interventions to reduce mortality.

	Liver (N = 8,913)	Lung (N = 3,913)	Heart (N = 6,490)	Kidney (N = 19,889)
Kaposi's Sarcoma diagnosed (%)	16 (0.18)	11 (0.28)	23 (0.35)	97 (0.49)
Median age (IQR)	54.5 (48.5-66)	60 (59-65)	60 (56-65)	57 (50-66)
Gender				
Male	13 (81.3)	6 (54.6)	19 (82.6)	75 (77.3)
Race				
White	13 (81.3)	9 (81.8)	17 (73.9)	31 (32.0)
Black	0 (0.0)	1 (9.1)	4 (17.4)	31 (32.0)
Mortality (%)	5 (31.3)	10 (90.9)	10 (43.5)	34 (35.1)

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

2692. Comparison of Demographics and Risk factors Between *Strongyloides stercoralis* Seropositive and Seronegative Solid-Organ Transplant Candidates: Experience from a Tertiary Acute Care Center in Florida

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Session: 276. Transplant ID: Parasitic Infections
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Background: *Strongyloides stercoralis* is a nematode endemic to the tropical and subtropical regions. In the United States, it is mostly found at southeastern states. Most infections are asymptomatic but disseminated and fatal infections have been reported in immunocompromised patients. At our institution, universal screening through *Strongyloides* antibody detection in serum among solid-organ transplant candidates began since 2010 and all seropositive candidates are treated before transplantation. We previously determined our incidence to be about 5%. The aim of this study was to determine demographic characteristics and risk factors that can be used for more cost-effective targeted screening.

Methods: We performed a retrospective cohort study of patients who underwent transplant evaluation from 2014 to 2016. A total of 228 charts were reviewed for *Strongyloides* serology status, eosinophilia, demographics and risk factors. Chi-square and Fisher exact tests were used to do a comparative analysis between *Strongyloides* seropositive and seronegative cohorts.

Results: We identified 113 seropositive (SP) patients and 115 seronegative (SN) patients. There were more males in the seropositive group (79%) compared with seronegative group (62%) ($P = 0.005$). Caucasians predominated in both groups (SP 71% vs. SN 57%; $P = 0.286$). No significant difference was found between both groups with regards to occupation with soil or water contact (SP 38% vs. SN 30%; $P = 0.281$), birthplace outside USA or travel outside of United States (SP 31% vs. SN 36%; $P = 0.732$). Eosinophilia occurred less in the seropositive group compared with the seronegative group (SP 16% vs. SN 30%; $P = 0.030$).

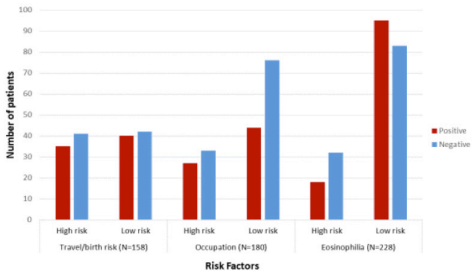
Conclusion: The study did not find any statistically significant difference in the demographic characteristics or risk factors that can be used for prediction of Strongyloides seropositivity among solid-organ transplant candidates. Hence, our institution will continue universal screening for *Strongyloides stercoralis* for all our transplant candidates. Our findings further question donor screening for *Strongyloides* that uses a similar questionnaire which may not be reliable to identify those infected with this parasite. This would put recipients at risk for a donor-transmitted infection.

Table 1. Demographic Characteristics of *Strongyloides* Seropositive and Seronegative Solid-Organ Transplant Candidates

	Serologic status for *Strongyloides*		
Variable	**Positive N= 113 N (%)**	**Negative N= 115 N (%)**	**P Value**
Gender			**0.005**
Male	89 (79)	71 (62)	
Female	24 (21)	44 (38)	
Age Group			**0.696**
> 50 years	90 (80)	91 (79)	
< 50 years	23 (20)	24 (21)	
Ethnicity			**0.286**
Caucasian	80(71)	66 (57)	
Hispanic	18 (16)	22 (19)	
African American	14 (12)	24 (21)	
Asian	1 (< 1)	3 (3)	
Occupation with soil or water contact			**0.281**
Yes	27 (38)	33 (30)	
No	44 (62)	76 (70)	
Born outside USA or Travel outside of USA			**0.732**
Yes	35 (31)	41 (36)	
No	78 (69)	73 (64)	
Eosinophilia[a]			**0.030**
Yes	18 (16)	34 (30)	
No	95 (84)	81 (70)	

[a]Eosinophilia defined as eosinophil count more than 5% of total white blood cell count.

Figure 1: Risk factors comparison between Strongyloides seropositive and seronegative patients



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

2693. Clinical Presentation of Toxoplasmosis and 30-Day Mortality in Transplant Recipients at Two Academic Medical Centers

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Session: 276. Transplant ID: Parasitic Infections
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Background: *Toxoplasma gondii* causes opportunistic infections in transplant recipients after primary, donor-derived, or reactivated infection. Diagnosis in solid-organ transplant (SOT) and hematopoietic stem cell transplant (HSCT) recipients may be delayed due to varied clinical presentations, which can mimic bacterial sepsis. These delays could contribute to significant associated mortality, with a reported rate exceeding 50% in disseminated disease. Further exploration of expanded donor screening, targeted recipient prophylaxis, and enhanced early detection may be warranted. We therefore examined patient characteristics, clinical presentation, time to toxoplasmosis diagnosis, and mortality in transplant recipients at two centers.

Methods: A retrospective chart review of SOT and HSCT recipients diagnosed with toxoplasmosis from 2002–2018 at Emory Healthcare and Duke University Hospital was performed, with cases identified via an electronic query of relevant ICD codes, positive serum or CSF toxoplasmosis PCRs, and pathologic diagnoses. Patient characteristics, including age, sex, race, time since transplantation, method of toxoplasmosis diagnosis, and symptoms, were abstracted. Primary outcomes included time from transplant to diagnosis and estimated 30- and 90-day all-cause mortality.

Results: 16 patients were identified, with a median age of 56 years at diagnosis. 50% were male, and the majority were white (63%) and SOT recipients (56%; see table). Median time from transplant to diagnosis was 295 days, with PCR the most common diagnostic modality (63%). In 31% of cases, toxoplasmosis was diagnosed after patient death. The most common clinical presentations were encephalitis (69%), respiratory