Table 2. Characteristics of Candidemia patients in the SARS-COV-2 negative and SARS-COV-2 positive cohorts from January 2020-May 2020

	SARS-CoV-2 Negative/Untested N = 19	SARS-CoV-2 Positive N = 12	P – value
Female, n (%)	10 (52.6)	5 (41.7)	0.716
Age, mean (SD)	58.2 (15.9)	69.3 (13.1)	0.051
Ethnicity, n (%)			
African American	10 (52.6)	10 (83.3)	0.233
White	5 (26.3)	1 (8.3)	
Other/Unknown	4 (21.1)	1 (8.3)	
Expired, n (%)	7 (36.8)	10 (83.3)	**0.025**
Length of Stay, mean (SD)	35.1 (32.2)	21.8 (13.6)	0.125
Charlson Comorbidity Index, n (%)			0.660
0 – 2	6 (31.6)	2 (16.7)	
3 – 4	6 (31.6)	4 (33.3)	
≥ 5	7 (36.8)	6 (50.0)	
Hospital Management, n (%)			
Central Venous Catheter	14 (73.7)	11 (91.7)	0.363
Corticosteroids	7 (38.9)	9 (75.0)	0.072
Intensive Care Unit	16 (84.2)	12 (100.0)	0.265
Ventilation	12 (63.2)	10 (83.3)	0.418
Total Parenteral Nutrition	4 (21.1)	1 (8.3)	0.624
Vasopressors	12 (63.2)	10 (83.3)	0.418
Fungal Culture Organism, n (%)			
Candida albicans	6 (31.6)	5 (41.7)	0.529
Candida dublinensis	2 (10.5)	0 (0.0)	
Candida glabrata	10 (52.6)	6 (50.0)	
Candida parapsilosis	1 (5.3)	0 (0.0)	
Candida tropicalis	0 (0.0)	1 (8.3)	

Bolded p-values indicate statistical significance at p-value < 0.05.

Conclusion. The prevalence of fungemia markedly increased during the COVID-19 surge. Increased use of corticosteroids and broad spectrum antimicrobials, prolonged use of central venous catheters and prolonged ICU length of stay likely contributed to this increase. Patients who developed candidemia co-infection with COVID-19 were found to have poorer outcomes as compared to those who were SARS-CoV-2 negative or untested.

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

292. Antibiotic Use Is Increased in Patients with Acute Respiratory Distress Syndrome (ARDS) Requiring Extracorporeal Membrane Oxygenation (ECMO) due to COVID-19 Compared with Influenza

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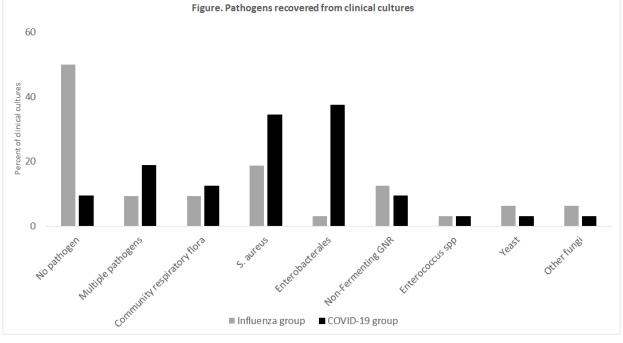
Background. During the COVID-19 pandemic, >50% of hospitalized patients (pts) received an antimicrobial. *E*CMO is increasingly used in COVID-19 pts with severe ARDS. ECMO has been used for ARDS due to influenza at our center in prior years. Pts on ECMO are at high risk for infections. We compared the rates of antibiotic (Ab) and antifungal (AF) use in pts on ECMO for COVID-19 vs influenza ARDS.

Methods. This was a retrospective review of pts on ECMO for COVID-19 (2020-2021) or influenza (2013-2019). Antimicrobials (Abs and AFs) were categorized as anti-MRSA, anti-pseudomonal β-lactams (AP-BL), carbapenems, and new broader spectrum β-lactams. We calculated total Ab and AF utilization, adjusted for ECMO duration.

Results. Seventy-one pts (36 COVID-19 and 35 influenza) were included. COVID-19 pts had longer ECMO duration (median: 25 vs 11 days, p=.03). 100% and 97% of pts with COVID-19 and influenza received ≥1 Ab, respectively, and 42% and 33% an AF, respectively. COVID-19 pts received longer duration of Abs (26 vs 10 days, p< 0.001) and but not AF. COVID-19 group (gp) were more likely to receive anti-MRSA Ab (69% vs 33%, p=.004); otherwise, there were no differences between gps in types of Abs used. When adjusted for ECMO days, COVID-19 gp received higher median number of Abs (1.23 vs 1, p=.06). Specifically, COVID-19 gp received higher median number of anti-MRSA Ab (0.2 vs 0, p=.007) and AP-BL (0.44 vs 0.28, p=.08). There was no difference in Ab-free days between gps, though the proportion of Ab-free days was lower (0.2 vs 0.36) in COVID-19 pts (p=.08). More COVID-19 pts had pathogens recovered from clinical cultures, especially S. aureus and Enterobacterales (Figure).

Pathogens recovered from clinical cultures



Patients recovered from clinical cultures of patients with COVID-19 and Influenza ARDS requiring ECMO

Conclusion. Among pts on ECMO, those with COVID-19 received significantly longer courses of Abs than those with influenza, even after adjusting for longer durations of ECMO. Differences were driven by receipt of anti-MRSA and AP-BLs. Recovery of pathogenic bacteria was greater in COVID-19 pts than influenza pts. Given difficulties in distinguishing pneumonia from airway colonization among ARDS pts on ECMO, development of diagnostic criteria for pt care, rational antimicrobial stewardship and further research are needed.

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293. Lung Cancer and Hematologic Malignancy (HM) Patients Are Associated with the Highest Risk of Progressing to Severe Disease and Mortality in Cancer Patients with COVID-19

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Background. Several studies have shown that underlying cancer is a risk factor for progression of COVID-19 to severe illness and fatal outcome but there is very little data that specifies which underlying cancer puts this patient population at the highest risk.

Methods. We retrospectively collected de-identified data on 1115 cancer patients diagnosed with COVID-19 between January and November 2020, at 12 centers in Asia, Australia, Europe, North America, and South America. Patient characteristics including age, type of malignancy (hematologic malignancy [HM], lung cancer, and non-lung cancer were determined in association with severe illness as well as all-cause mortality within 30 days after COVID-19 diagnosis.

Results. By multivariable logistic regression analysis, independent risk factors for 30-day mortality in cancer patients included age > 65 (OR 6.64; 95% CI 3.351to 12.55; p< 0.0001), ALC < 0.5 K/microliter (OR 2.10; 95% CI 1.16 to 3.79; p=0.014), and anemia at < 10g/dl (OR 2.41; 95% CI 1.30 to 4.44; p=0.005). Among cancer patients, the 30-day mortality rate was significantly higher in patients with lung cancer than in patients with non-lung cancer solid tumors, including those with lung metastases (22% vs 9%; p=0.001). Patients with HM tended to have higher 30-day mortality than patients with non-lung cancer solid tumors (13% vs 9% p=0.07) and tended to have a lower mortality rate than patients with lung cancer (p=0.07). Furthermore, HM patients were more likely to be lymphopenic and anemic at diagnosis as well as progress to LRTI and be placed on ventilatory support compared to non-lung cancer solid tumor patients (p= or < 0.01). In addition, lung cancer and HM patients were more likely to develop hypoxia and require hospital admission than non-lung cancer solid tumor patients (p=0.01).

Conclusion. Lung cancer and HM patients are associated with the highest risk of progressing to severe disease and mortality in cancer patients with COVID-19. Hence, cancer patient population should be given the highest priority as far as prevention [vaccination with boosters if needed] as well as preemptive early therapy with monoclonal antibodies right after the onset of COVID-19.

Disclosures. **Monica Slavin, MBBS,MD**, **F2G** (Advisor or Review Panel member)**Merck** (Advisor or Review Panel member)**Pfizer** (Advisor or Review Panel member)

294. Surveillance for Potential Post-Acute COVID-19 Syndrome Medical Complications in the Emergency Department (ED) – A Retrospective Longitudinal Study of ED Patients Who Had Evidence of SARS-CoV-2 Infection Versus Those Who Did Not

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Background. As the COVID-19 pandemic continues, growing attention has been placed on whether patients previously infected with SARS-CoV-2 have an increased risk of developing and/or exacerbating medical complications. Our study aimed to determine whether individuals with previous evidence of SARS-CoV-2 infection prior to their current emergency department (ED) visit were more likely to present with specific clinical sign/symptoms, laboratory markers, and/or clinical complications.