Table 2. Clinical Outcomes and Adverse Events in ICU Patients with COVID-19

	Culture-negative, Antibiotics ≤ 72 h (n = 10)	Culture-negative, Antibiotics > 72 h (n = 32)	Culture-positive (n = 23)	P-value
Clinical Outcomes*, n (%) or median (IQR)				
Clinical Success	4 (40)	10 (31.3)	9 (39.1)	0.79
In-hospital Mortality	6 (60)	22 (68.8)	14 (60.9)	0.79
Time from Antibiotic Discontinuation to Re-start (days)	4.5 (2-7)	4 (2-8)	6 (4-6)	0.68
Time to ICU Discharge from Antibiotic Start (days)	8.5 (4-15)	11.5 (5.5-21)	11 (6-15)	0.57
Time to Hospital Discharge or Death from Antibiotic Start (days)	12.5 (4-16)	18.5 (6.5-25.5)	13 (8-34)	0.29
Adverse Events*, n (%)				
Total # Patients	2 (20)	13 (40.6)	7 (30.4)	0.44
AKI	1 (10)	8 (25)	4 (17.4)	0.71
MDRO	0	8 (25)	2 (8.7)	0.14
Antibiotic-related Rash	1 (10)	0	1 (4.3)	0.13
Drug Fever	0	1 (3.1)	0	1
Clostridioides difficile Infection	0	0	0	1

Definitions:
- Clinical success: discharged alive or > 2-point decrease in WHO 10-point Clinical Progression Scale score from day of antibiotic initiation to day 30
- AKI: increase in SCr ≥ 0.3 mg/dL or increase in SCr to ≥ 150-200% of baseline or urine output < 0.5 mL/kg/h for > 6 h (AKIN definition); assessed ≥ 24 h following initiation and up to 48 h following discontinuation of initial antibiotic regimen
- MDRO: MRSA, VRE, or Gram-negative bacteria resistant to one or more classes of antimicrobial agents per CDC definition

Abbreviations: ICU, intensive care unit; h, hours; IQR, interquartile range; AKI, acute kidney injury; MDRO, multidrug-resistant organism; WHO, World Health Organization; SCr, serum creatinine; AKIN, Acute Kidney Injury Network; MRSA, methicillin-resistant *Staphylococcus aureus*; VRE, vancomycin-resistant *Enterococcus*; CDC, Centers for Disease Control and Prevention

Comparisons were made using the chi-square test or Fisher's exact test for nominal variables and the Kruskal-Wallis test for continuous variables; P-values < 0.05 were considered statistically significant; All analyses were conducted using SAS Enterprise Guide 7.1 (SAS Institute Inc., Cary, NC)

Conclusion. In ICU patients with COVID-19, empiric broad-spectrum ABX are often overutilized with an inertia to de-escalate despite negative culture results, potentially increasing the risk of adverse events. This remains an important area for focused antimicrobial stewardship efforts to mitigate the development of multidrug resistance.

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286. Infectious Complications and Antimicrobial Utilization in Hospitalized Patients with COVID-19

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Session: P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes

Background. Hospitalized patients with COVID-19 have created increased demands on health care infrastructure and resources. Bacterial and fungal infections have been reported and have increased the need for antimicrobial utilization. We performed a retrospective chart review to characterize bacterial infections and antibiotic utilization during the COVID-19 surge at our tertiary care center.

Methods. All patients diagnosed with COVID-19 using SARS-CoV-2 PCR admitted to MedStar Georgetown University Hospital from 01Mar2020 through 31Aug2020 were included in the analysis. Data was collected on hospital-wide antimicrobial utilization [mean days of therapy per 1000-patient-days (DOT)] during the 6-month surge and was compared to antimicrobial utilization during a 6-month period that preceded the COVID-19 surge. Clinical and microbiological data and patient outcomes were also collected and analyzed.

Results. A total of 238 patients met eligibility criteria during the observation period, of which 25.6% (n = 61) developed a bacterial, fungal, or viral co-infection. Culture-positive bacterial complications were seen in 21.8% (n = 52) with 32.8% (n = 20) having a multidrug resistant organism (MDRO). There was a statistically significant difference between COVID-19 patients with co-infection and those without for intubation (p < 0.001), vasopressor use (p < 0.001), and renal replacement therapy (p = 0.001). COVID-19 patients with co-infections had a longer mean length of stay (21.9 days vs 13.5 days, p < 0.001) and greater mortality (32.8% vs 20.6%, p = 0.006) compared to those without a co-infection, respectively.

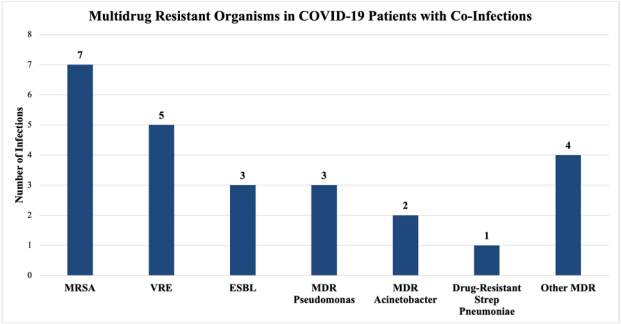
Mean antimicrobial utilization for the entire hospital population was 790.6 DOT during the COVID surge compared to 928.7 DOT during a 6-month period preceding the COVID surge (p < 0.001). For all COVID-19 patients, antimicrobial utilization was 846.9 DOT; however, this increased to 1236.4 DOT for COVID-19 patients with co-infections.

Table 1. Demographics

Complications, n (%)	Sample (n=238)	Co-infection (n=61)	P-value
Respiratory Support	193 (81.8)	53 (86.9)	0.180
Intubation	66 (27.7)	34 (55.7)	< 0.001*
Vasopressors	58 (24.4)	32 (52.5)	< 0.001*
Renal Replacement Therapy	48 (20.2)	21 (34.4)	0.001*
Length of hospital stay, mean (d ± SD)	13.53 ± 12.9	21.92 ± 18.2	<0.001*
Deceased	49 (20.6)	20 (32.8)	0.006*

Table 2. Antimicrobial Utilization in COVID-19 Patients

	Sample (N=238)	Co-Infection (n=61)	No Infection (n=177)
DOT per 1000-patient-days	846.9	1236.4	570.4
Mean Days of Antimicrobial Use	6.8	9.75	5.91
Median Days of Antimicrobial Use	5	6	4



Conclusion. Although hospital-wide antimicrobial utilization had decreased during the COVID surge, COVID-19 patients with co-infections demonstrated a disproportionate use of antimicrobial agents as well as ICU resources. As MDRO infections were relatively common, antimicrobial stewardship should be prioritized in the COVID-19 population.

Disclosures. **Lan Duong, Pharm.D.**, **Astra Zeneca** (Shareholder)**Eli Lilly & Co.** (Shareholder)**Gilead Sciences, Inc.** (Shareholder)**Merck & Co.** (Speaker's Bureau)**Moderna, Inc.** (Shareholder)**Novavax, Inc.** (Shareholder)**Sarepta Therapeutics** (Shareholder)**Thermo Fisher Scientific** (Shareholder) **Princy N. Kumar, MD**, **AMGEN** (Other Financial or Material Support, Honoraria)**Eli Lilly** (Grant/Research Support)**Gilead** (Grant/Research Support, Shareholder, Other Financial or Material Support, Honoraria)**GSK** (Grant/Research Support, Shareholder, Other Financial or Material Support, Honoraria)**Merck & Co., Inc.** (Grant/Research Support, Shareholder, Other Financial or Material Support, Honoraria)

287. Characteristics and Outcomes of COVID-19 Patients with Candidemia at a Community Hospital in Chicago.

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Session: P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes

Background. 1,416 patients with acute COVID-19 infection were admitted to our hospital in 2020. During that year we noticed an alarming increase in cases of nosocomial Candidemia: 26 versus an average of 2.8 cases per year over the previous 5 years. 19 of the 26 episodes (73%) of Candidemia occurred in patients who were admitted with acute COVID-19 infection. Recent reports suggest that hospitalized patients with COVID-19 are at increased risk for developing Candidemia, however their clinical characteristics, risk factors and outcomes have not been well described. We evaluated the risk factors and mortality of hospitalized COVID-19 patients with Candidemia.

Methods. We performed a retrospective chart review of 19 patients with Candidemia and confirmed COVID-19 infection at a 292-bed community teaching hospital in Chicago, Illinois from January through December 2020. We report a