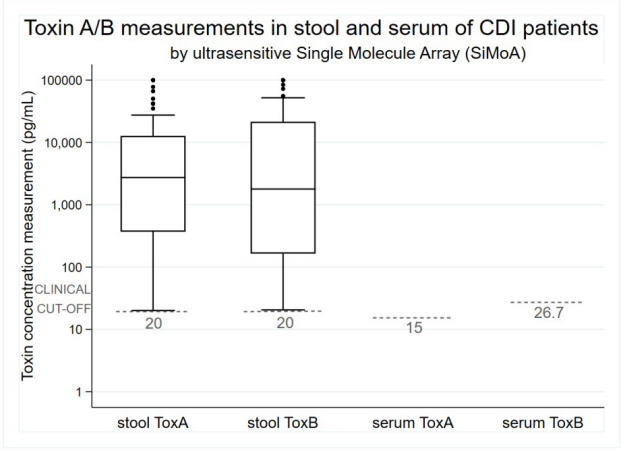
Table 1. Demographics, Baseline Laboratory Values, and Clinical Outcomes for the cohort

Variable	n = 169	
Demographic Information		
Age Median (IQR)	68 (54 – 78)	
Male Gender	90	53.3%
Race		
White	126	74.6%
African American	21	12.4%
Other	18	10.7%
Unknown	4	2.4%
Ethnicity		
Hispanic	9	5.3%
Not Hispanic	144	85.2%
Unknown	16	9.5%
Laboratory Results		
WBC (10^3 cells/μL) Median (IQR)	11.5 (7.4 – 18.6)	
WBC ≥15 x 10^3 cells/μL	61	36.1%
Creatinine (mg/dl) Median (IQR)	1.1 (0.8 – 1.9)	
Creatinine ≥ 1.5 mg/dl	61	36.1%
Albumin (g/dl) Median (IQR)	3 (2.5 – 3.6) n = 152	
Albumin ≤ 3 g/dl	73 (n = 152)	43.2%
027 / NAP1 / B1 strain	17	10.1%
Severe Clinical Outcomes - Total		
ICU admission	24	14.2%
Colectomy	1	0.6%
Death within 40 days	14	8.3%
Severe Clinical Outcomes – Attributed to CDI		
ICU admission	13	7.7%
Colectomy	1	0.6%
Death within 40 days	2	2.4%
Severity Classifications* n = 153		
IDSA Severe	90	74.4%
ESCMID Severe	93	76.9%
Zar *et al* Severe	73	60.3%
Belmares *et al* Severe	23	19.0%

Figure 1. Comparison of TcdA and TcdB concentrations, as measured by Simoa, in serum and stool. Clinical cutoffs are shown: stool, 20 pg/ml for TcdA and for TcdB; serum 15.0 pg/ml for TcdA and is 26.7 pg/ml for TcdB. Signals below these cut-offs are below backgrounds and so negative.



Conclusion: In contrast to earlier published findings which reported on the presence of detectable toxin in the serum of a small number of patients with CDI, our work did not support this observation. Although Simoa is highly sensitive for detection of picogram quantities of TcdA or TcdB it was unable to detect either toxin in serum during CDI. This result does not support the hypothesis that toxemia develops even in severe *C. difficile* infection.

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646. Adapting the modified Carbapenem Inactivation Method to assess for possible beta-lactamase mediated resistance in Piperacillin-Tazobactam resistant/ Ceftriaxone susceptible Escherichia. coli and Klebsiella pneumoniae

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Session: P-25. Diagnostics: Bacteriology/mycobacteriology

Background: A cluster of piperacillin-tazobactam resistant/ceftriaxone susceptible *Escherichia coli* and *Klebsiella pneumonaie* bacteremias were noted at our institution. A review of the literature suggested this resistance phenotype was mediated by a beta-lactamase. We sought to further corroborate this phenotypically.

Methods: We adapted the "carbapenem inactivation method" utilizing piperacillin-tazobactam and ceftriaxone discs on all *E. coli* and *K. pneumoniae* isolated from blood and demonstrating piperacillin-tazobactam resistance but with ceftriaxone susceptibility. We utilized pan-susceptible and carbapenem resistance *Enterobacteriaceae* reference strains as well as third generation cephalosporin resistant, piperacillin-tazobactam susceptible isolates as controls.

Results: 96% of the piperacillin-tazobactam resistant, ceftriaxone susceptible strains demonstrated the capacity to degrade the piperacillin-tazobactam discs while 100% spared the ceftriaxone discs. 75% of the piperacillin-tazobactam susceptible, ceftriaxone resistant control strains spared the piperacillin-tazobactam discs while degrading the ceftriaxone discs.

Conclusion: The resistance phenotype observed is due to beta-lactamase production and the modified carbapenem inactivation method can be adapted to probe for other beta-lactamases. Further study is required to definitively identify which beta-lactamase is responsible.

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

647. Adoption of the updated fluoroquinolones breakpoints for Gram negative bacteria in clinical microbiology laboratories

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Session: P-25. Diagnostics: Bacteriology/mycobacteriology

Background: Despite the multiple safety warnings related to fluoroquinolones (FQs) treatment, their use remains unavoidable in several occasions due to their broad spectrum of coverage including activity against multi-drug resistant glucose non-fermenting Gram-negative bacteria such as *Pseudomonas* spp., and high oral bioavailability. The Clinical and Laboratory Standards Institute (CLSI) has lowered the FQs minimal inhibitory concentrations (MICs) breakpoints for *Salmonella* spp. in 2012 and 2013, and for the *Enterobacterales* and *P. aeruginosa* in 2019. We aim to explore the number of hospitals that adopted the revised breakpoints.

Methods: We conducted a cross-sectional phone-based survey querying the 43 microbiology laboratories that serve 100% of the acute care and long-term hospitals in Connecticut to determine use of revised FQs MIC breakpoints for Gram-negative bacteria.

Results: Six laboratories refer antimicrobial susceptibility testing to another local hospital microbiology laboratory or to a national reference laboratory. Thus, we obtained information about the study question from a total of 37 microbiology laboratories. Eight laboratories (21.6%) were affiliated to university hospitals and 29 (78.4%) were community-based. Microscan Beckman coulter MicroScan was the most common antimicrobial susceptibility test method used in 15 (40.6%) microbiology laboratories followed by BioMérieux Vitek 2 in 13 (35.1%) laboratories. Four laboratories (10.8%) only adopted the revised CLSI FQs breakpoints for *Enterobacterales, P. aeruginosa*, and *Salmonella* spp, 5 (13.5%) implemented the revised breakpoints for *Enterobacterales* and *P. aeruginosa* but not for *Salmonella* spp., and 8 (21.6%) laboratories adopted the revised CLSI breakpoints for *Salmonella* spp. but not for *Enterobacterales* and *P. aeruginosa*.

Conclusion: The use of outdated CLSI breakpoints for FQs against Gram-negative bacteria remains common in the microbiology laboratories. There is an urgent need to mitigate the impact of using the outdated FQs breakpoints and reporting false susceptibility to FQs.

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

648. BioFire® FilmArray® Pneumonia plus Panel Performance Evaluation: A Multicenter, International Collaborative Study

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EME Evaluation Program Collaborative

Session: P-25. Diagnostics: Bacteriology/mycobacteriology

Background: Classical methods to identify causes of community acquired, healthcare and ventilator associated pneumonia can be insensitive and slow, leading to unnecessary or inappropriate antimicrobial therapy. The BioFire® FilmArray®