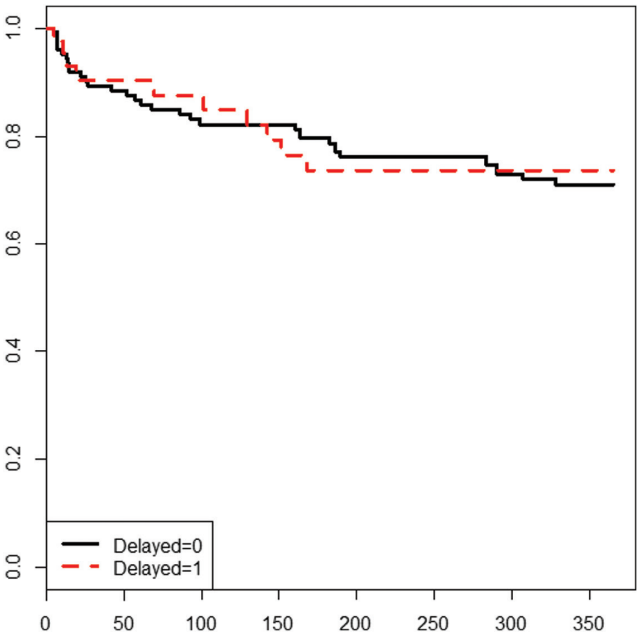
16.5%). 59 (34%) patients received delayed appropriate antibiotics (delayed group) and 116 (66%) patients received appropriate initial empirical antibiotics (appropriate group). Treatment failure was observed in 5 (8.4%) patients and 9 (7.8%) patients in each group. After matching, the risk of treatment failure was similar between the both groups (adjusted odd ratio [aOR] 1.05; 95% confidential index [CI] 0.26–4.15). Mean days of hospitalization length was similar (10.8 days in delayed group vs. 11.1 days in appropriate group; $P = 0.717$), and recurrence rates was also similar between the both groups (adjusted HR [aHR] 0.92; 95% CI 0.43–2.00, Figure 1).

Conclusion. The delay in appropriate antimicrobial therapy did not affect the clinical outcome of patients if they were properly treated thereafter. This suggests that prescription of a broad-spectrum antibiotics was not needed as initial empirical antibiotics for the treatment of APN with a potential risk of EBSL-PE.

Figure 1. Time to recurrence within 1 year after initial APN episodes.



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

2409. Drug-Induced Liver Injury (DILI) in a National Cohort of Hospitalized Patients Treated With Aztreonam and Ceftazidime

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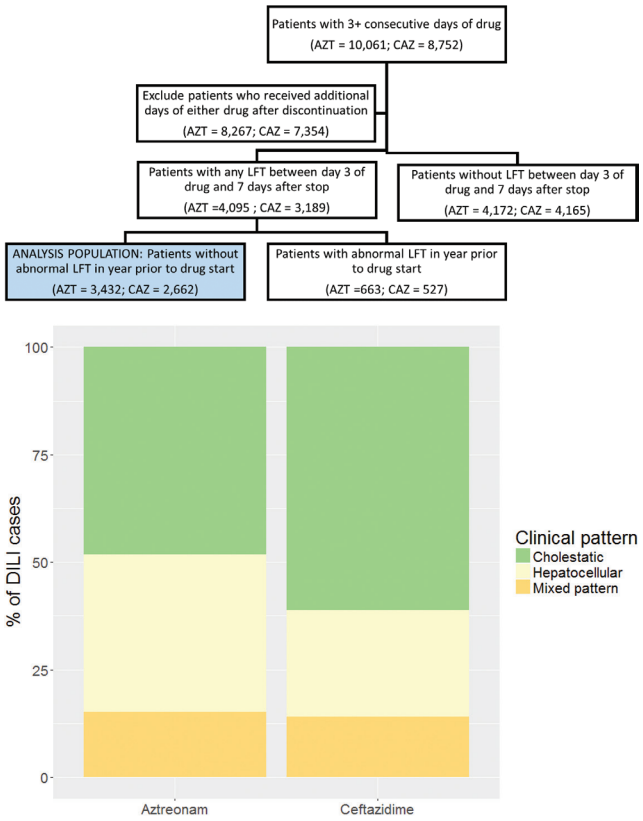
Session: 250. Treatment of AMR Infections
Saturday, October 6, 2018: 12:30 PM

Background. DILI, although uncommon, can be a severe and even fatal complication of antibiotic use. The safety of novel regimens targeting MDR Gram-negative bacteria (GNB) is an important concern. Cephalosporins such as ceftazidime (CAZ) are rare causes of clinically apparent DILI, while data regarding DILI with other antibiotics such as the monobactam aztreonam (ATM) are sparse. ATM and CAZ are partnered with many novel β-lactamase inhibitors (i.e., avibactam, AVI) as therapy for MDR infections (CAZ-AVI and ATM-AVI) We aimed to compare the incidence and type of DILI associated with ATM and CAZ.

Methods. Using a cohort of patients hospitalized within Veterans Health Administration (VHA), we identified patients treated with ATM or CAZ for 3 or more consecutive days who also had LFTs measured during (day 3 or later) or within 7 days of stopping treatment. We excluded patients with abnormal LFTs in the year prior to ATM or CAZ treatment. Using alanine aminotransferase, alkaline phosphatase, and bilirubin measures, we applied clinical chemistry criteria to identify cases of DILI. We applied further criteria to classify DILI according to clinical pattern and severity (mild vs. moderate/severe), comparing the relative frequencies between ATM and CAZ.

Results. Among 18,813 courses of CAZ or ATM, 3,432 ATM and 2,662 CAZ courses met our criteria (Figure 1). While the overall rate of any DILI was higher in ATM than CAZ (5.8% vs. 3.2%, $P < 0.01$), the rate of moderate/severe DILI was similarly low for both agents (1.6% in ATM vs. 1.3% in CAZ, $P = 0.3$). The clinical pattern of DILI cases differed by drug, with the hepatocellular pattern comprising a larger proportion of the ATM DILI cases (37%) than the CAZ DILI cases (25%) and the cholestatic pattern comprising a smaller proportion (48% vs. 61%) (Figure 2).

Conclusion. In this national cohort of hospitalized patients treated with ATM or CAZ, the overall rate of DILI was significantly higher in patients treated with ATM than in those treated with CAZ. However, there is a similarly low rate of moderate/severe DILI. Although further analyses are required to better understand causal mechanisms and clinical risks of DILI in patients receiving ATM or CAZ, these data from a large national cohort provide a useful benchmark of drug safety.



Disclosures. **T. Lodise**, paratek: Consultant and Scientific Advisor, Consulting fee.

2410. Clinical Outcomes Associated With Various Treatment Options for Infections Caused by Carbapenem-Resistant *Enterobacteriaceae*

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Background. Infections caused by carbapenem-resistant *Enterobacteriaceae* (CRE) have been designated an urgent level threat to public health. With the advent of novel β lactam/β-lactamase inhibitor combinations, the armamentarium against CRE is expanding. Our study aims to evaluate clinical outcomes in patients with CRE infections.

Methods. A retrospective study was conducted to compare clinical outcomes in adult patients with documented CRE infections between January 2009 and December 2017 and received either ceftazidime–avibactam (CAZ-AVI) or best available therapy (BAT). Best available therapy was defined as antimicrobials with susceptibility to the causative pathogen according to CLSI breakpoints. The following clinical outcomes were assessed: clinical cure, total length of stay (LOS), 30-day mortality, and infection-related mortality.

Results. One hundred and fifty patients met criteria for inclusion; 25 in the CAZ-AVI group and 125 in the BAT group. The median Charlson Comorbidity Index (CCI) was 6 in both cohorts, indicating a low baseline probability for survival. The most common primary sites of infection for the CAZ-AVI and BAT cohorts, respectively, were the following: blood (24% vs. 18%, $P = 0.580$), urine (36% vs. 23%, $P = 0.209$), intraabdominal (16% vs. 14%, $P = 0.754$), and lung (12% vs. 27%, $P = 0.132$). Combination therapy was utilized in 8% of patients in the CAZ-AVI group compared with 42% in the BAT group. Combinations in the BAT group consisted of colistin-based (68%), tigecycline-based (13%), and aminoglycoside-based (13%) regimens. Although clinical cure rates were similar between both groups (80% vs. 72%, $P = 0.469$), there was a