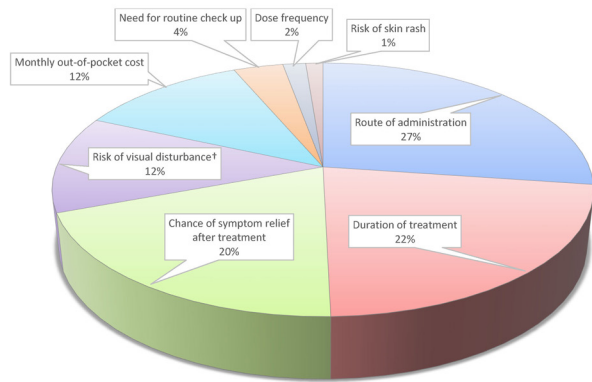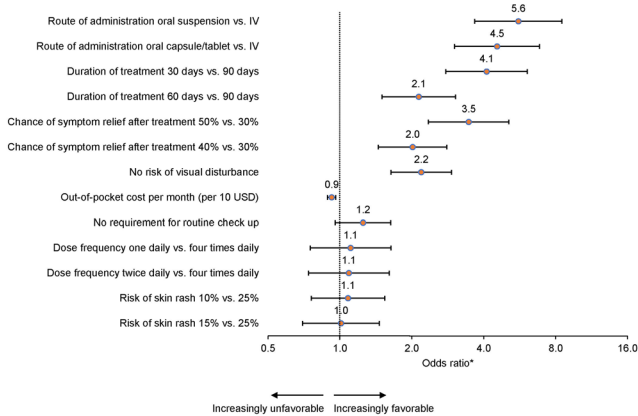Figure 2. Relative attribute importance*

*Calculated by dividing the range of part-worth utilities between the most and least preferred levels of an attribute by the sum of the part-worth utility ranges across all eight attributes

†Includes blurred vision and colour vision change

Figure 3. Odds ratios for each attribute level

*Logarithmic scale. IV, intravenous; USD, United States Dollar

Figure 4. Marginal willingness to pay for IMI treatment attributes

	Willingness to pay (monthly out-of-pocket cost in USD)
Chance of symptom relief after treatment	
50%	147.89
40%	83.43
30%	Reference
Risk of skin rash	
10%	9.21
15%	1.16
25%	Reference
No risk of visual disturbance	93.38
Route of administration	
Oral capsule/tablet	180.49
Oral suspension	204.95
Intravenous infusion	Reference
Dose frequency	
Once daily	12.19
Twice daily	10.25
Four times daily	Reference
Duration of treatment	
30 days	168.49
60 days	90.57
90 days	Reference
No requirement for routine check-up	26.47

IMI, invasive mold infection; USD, United States Dollar

Disclosures. All authors: No reported disclosures.

2253. Comparison of Outcomes Between Patients with and without Cystic Fibrosis Treated with Ceftolozane–Tazobactam for *Pseudomonas aeruginosa* Infections

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Session: 246. Clinical Outcomes of Infections with Resistant Organisms
Saturday, October 5, 2019: 12:15 PM

Background. Ceftolozane–tazobactam (C/T) was designed to have enhanced activity against *P. aeruginosa* and has been shown to retain activity against many isolates that are resistant to other antipseudomonal β-lactams. However, there are no data comparing outcomes in patients with and without cystic fibrosis (CF).

Methods. Retrospective, multicenter cohort study conducted at 5 hospitals that included all patients with *P. aeruginosa* infections who received C/T as definitive therapy between November 2016 and December 2018. The primary outcome at 90 days was a composite of mortality, recurrence, readmission, and inappropriate response at end of therapy (EOT). The secondary outcome was to describe baseline C/T susceptibility and emergence of resistance. All outcomes were adjudicated by 2 infectious diseases specialists.

Results. Thirty-five, 27 non-CF and 8 CF, patients were included. CF patients were younger, had greater baseline C/T resistance (50.0% vs. 8.3%, $P = 0.02$) and were more likely to receive combination therapy. The most common site of infection was pulmonary (71.4%) followed by intra-abdominal (14.3%) and osteomyelitis (5.7%). Overall, 54.3% of patients had an unsuccessful outcome with no difference between CF and non-CF patients (62.5% vs. 51.9%, $P = 0.70$). There was also no difference between each component of the primary outcome. All 4 CF patients with a baseline-resistant isolate had an appropriate response at EOT, while neither of the 2 non-CF patients did. The C/T MIC distribution in CF and non-CF patients was ≤ 2 µg/mL (0.0%, 64.2%), 4 µg/mL (50.0%, 25%) ≥ 8 µg/mL (50.0%, 8.4%). The median duration of C/T in CF and non-CF patients was 18.5 days (interquartile range [IQR], 14–37.5 days) and 15 days (IQR, 10–25 days). Ten, 7 non-CF and 3 CF, patients had a *P. aeruginosa* isolate cultured and tested for C/T susceptibility within 90 days of index culture with 80% having an MIC increase. Non-CF patients treated for > 14 days were more likely to have an MIC increase ($P = 0.047$). All CF patients had an MIC increase.

Conclusion. We did not observe a difference in the rate of unsuccessful outcome between CF and non-CF patients; however, our sample size was small. CF patients were more likely to be resistant to C/T at baseline. Resistance emerged frequently in both groups following exposure to C/T.

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

2254. Multicenter Evaluation of Ceftazidime–Avibactam for Multidrug-Resistant *Pseudomonas aeruginosa* Infections

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Session: 246. Clincal Outcomes of Infections with Resistant Organisms
Saturday, October 5, 2019: 12:15 PM

Background. Ceftazidime–avibactam (CZA) is a novel cephalosporin/β-lactamase inhibitor with activity against carbapenem-resistant Enterobacteriaceae (CRE) and multidrug-resistant (MDR) *Pseudomonas aeruginosa* (PA). Real-world experience with CZA for CRE infections is accumulating but data on its use for MDR PA infections remains limited.

Methods. Retrospective, multicenter cohort study describing the clinical characteristics and outcomes of patients treated with CZA (≥ 72 hours) for MDR PA infections between 2015 and 2018.

Results. Fifty-one patients were included. The median (IQR) age was 61 (43, 71) years. Most patients had MDR risk factors including recent hospitalization (74.5%), recent antimicrobial exposure (84.3%), and/or previous infection or colonization with an MDR pathogen (58.8%). The median Charlson Comorbidity score was 4 (2, 6) and the median APACHE II score was 20 (12, 29). Infections were predominantly hospital-acquired (68.6%) and 52.9% of patients were in the ICU at infection onset. The common sources were respiratory tract (60.8%), osteoarticular (11.8%) and skin and soft tissue (11.8%). Two patients had positive blood cultures. PA antibiotic susceptibilities were as follows: ceftazidime 52.6% ($n = 51$), CZA 92.0% ($n = 25$), ciprofloxacin 10% ($n = 30$), meropenem 19.6% ($n = 46$), piperacillin–tazobactam 30.4% ($n = 4$) and tobramycin 72.9% ($n = 48$). Most (60.8%) infections were polymicrobial including 15 (29.4) CRE co-infections. CZA was started 97 (50, 170) hours after culture collection and continued for 9 (7, 14) days. Only 8 patients (15.7%) received active antibiotic therapy before CZA. Combination CZA therapy was used 35.3%, most often an aminoglycoside (8/18, 44.4%). Clinical cure or improvement was achieved in 40 patients (78.4%), and 42 (82.4%) were discharged alive. Among patients with repeat cultures ($n = 11$),

CZA resistance development was not detected. Three patients (5.9%) experienced infection recurrence within 30 days of completing therapy.

Conclusion. The use of CZA was associated with high rates of favorable outcomes in complex patients with MDR PA infections. Future studies evaluating long-term outcomes and comparative studies are needed to more precisely define the role of CZA for MDR PA infections.

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2255. The Use of Dalbavancin for *Staphylococcus aureus* Bacteremia in Persons Who Inject Drugs (PWID)

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Session: 246. Clincal Outcomes of Infections with Resistant Organisms
Saturday, October 5, 2019: 12:15 PM

Background. *Staphylococcus aureus* is a significant cause of bacteremia and is associated with high morbidity and mortality rates. In patients with *S. aureus* bacteremia, studies have proven that intravenous antibiotics are needed for the entire course of therapy. For some groups of patients, specifically in persons who inject drugs (PWID), the long-term use of IV antibiotics is not safe or feasible. In this population, the current options would be obtaining intravenous access daily for antibiotic infusions, oral antibiotics, or being admitted to a facility that can monitor the patient. Data concerning the utilization of dalbavancin for the treatment of *S. aureus* bacteremia are limited.

Methods. This was a multicenter, retrospective case series of patients treated with four to six weekly doses of dalbavancin at 5 infusion centers in 3 states under the care of Metro Infectious Disease Consultant (MIDC) physicians between January 1 and December 31, 2018. All patients received intravenous therapy through a peripherally inserted catheter that was removed immediately after the infusion was completed. All patients were evaluated by an MIDC physician at the time of the initial dalbavancin dose, and weekly through their course of therapy. Cure was defined as negative blood cultures and no clinical evidence of persistent or relapsing infection. All patients completed their prescribed dosing and had phone follow-up to assess treatment efficacy at weeks 4, 8, 12, and 24.

Results. Twenty-one patients were included in the analysis. All patients began therapy for *S. aureus* bacteremia as inpatients and were transitioned to dalbavancin as outpatients. All patients received dalbavancin 1 g followed by 500 mg doses for at least 3 more weeks with an average of 4 weeks of therapy. Of the 21 patients, 16 were able to be contacted post therapy. Of the 16 patients, 2 patients were readmitted within the 6 month time frame for recurrent bacteremia related to intravenous drug usage. The remaining 14 patients remained disease free at the 6 month interval. No patients experienced a line related issue or *C. difficile* infection during the course of therapy.

Conclusion. Use of dalbavancin to treat *S. aureus* bacteremia infections resulted in clinical cure and markedly decreased healthcare costs.

Disclosures. All authors: No reported disclosures.

2256. Baloxavir Marboxil in Combination with Oseltamivir in Two Critically Ill Patients with Influenza A (H1N1; 2009 strain) on Veno-Venous Extra-Corporal Membranous Oxygenation

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Session: 246. Clincal Outcomes of Infections with Resistant Organisms
Saturday, October 5, 2019: 12:15 PM

Background. Currently, there are no clinical data regarding the use of baloxavir marboxil in patients with complicated influenza infection. A study in a mouse model of influenza A infection suggested that there may be a potential benefit of combination therapy with neuraminidase inhibitors. We present the first reported use of baloxavir marboxil in combination with oseltamivir in two critically ill patients requiring veno-venous extracorporeal membrane oxygenation (VV-ECMO) support due to severe acute respiratory distress syndrome (ARDS) caused by influenza AH1N1 2009.

Methods. Cases: (1) 56-year-old man with a history of coronary artery disease who was vaccinated for flu this season, presented with 5 days of cough and dyspnea and required cannulation for VV-ECMO due to severe ARDS. He was placed on continuous renal replacement therapy (CRRT) for renal failure as well as vasopressor and inotropic support. Bronchoalveolar lavage (BAL) polymerase chain reaction (PCR) was positive for Influenza A H1N1 2009 strain. He received a dose of baloxavir 80 mg on Day 1 and a 7-day course of oseltamivir which was started on Day 0. Influenza PCR testing obtained 5 days after receipt of baloxavir was negative. The patient was decannulated on hospital day 7 and extubated at 14 days. (2) 50-year-old man with a history of hypertension and dyslipidemia who was not flu vaccinated, presented with symptoms of cough and dyspnea for 3 days. He was cannulated due to severe ARDS. He required CRRT for renal failure. BAL PCR tested positive for Influenza A H1N1 2009 strain. He was given two 80 mg doses of baloxavir on hospital days 1 and 5 and treated with oseltamivir for 10 days. Despite a negative PCR test for influenza on day 15, the patient remained critically ill on ECMO with multisystem organ failure.

Results. -

Conclusion. We describe the first reported clinical use of baloxavir in combination with oseltamivir for influenza A H1N1 infection in two critically ill patients with respiratory failure requiring VV ECMO. Further pharmacokinetic/pharmacodynamic analysis is needed to determine optimal dosing in critically ill patients, and those requiring CRRT. Baloxavir synergy with the neuraminidase inhibitors may be of benefit in critically ill patients, and additional prospective clinical study is needed.

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2257. BDG-Guided Management of Empirical Antifungal Therapy: a Real-life Experience in a Hospital-Wide Context with High Incidence of Non-albicans Candida Infection

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Session: 246. Clincal Outcomes of Infections with Resistant Organisms
Saturday, October 5, 2019: 12:15 PM

Background. BDG-guided management of empirical antifungal therapy (AT) has been suggested as a tool to rule out invasive candidiasis (IC) and discontinue AT in critically ill patients. However, some authors reported lower BDG sensibility for non-albicans *Candida* (NAC) infection. Impact of BDG use in a hospital wide setting has yet to be determined.

Methods. We performed a retrospective observational study of consecutive patients admitted to a 1535-bed teaching hospital from November 2015 to August 2017. Adult patients starting empirical AT and performing at least one BDG test for a suspected fungal infection were included. According to first BDG result and AT management, patients were classified in 3 groups: (G1) negative index BDG and early AT withdrawal; (G2) negative index BDG and AT continued; (G3) positive index BDG and AT continued. IC was defined as monomicrobial *Candida* spp. isolation from blood cultures and/or surgical specimen. Comparison of the 3 groups was made using post-hoc Bonferroni correction. Univariate and multivariate analyses of risk factors for all-cause 30 days mortality were performed using binary logistic regression model.

Results. Study population consisted of 208 patients, of which 46 (22.1%) were included in G1, 79 (38.0%) in G2, and 83 (39.9%) in G3. NAC species were more commonly isolated from patients with IC and negative BDG ($P = 0.005$). IC was diagnosed in 2.2%, 13.9%, and 19.3% of G1, G2, and G3, respectively ($P < 0.01$ for G1 vs. G3). Median AT DDD were 8, 28, and 20 ($P < 0.01$ for G1 vs. G2 and G1 vs. G3) and 30-day mortality rate was 21.4%, 16.5%, and 30.1%, respectively. Factors associated with 30-day mortality were age, Charlson Comorbidity Index (CCI), ICU admission, SOFA score, septic shock, orotracheal intubation, CVVH and index BDG ≥ 80 pg/mL. At multivariate model, independent risk factors for 30-day mortality were CCI (OR 1.4, 95% CI 1.2–1.6, $P < 0.001$), SOFA score (OR 1.2, 95% CI 1.1–1.3, $P < 0.001$) and index BDG$\geq$80 pg/mL (OR 2.4, 95% CI 1.2–4.8, p = 0.012). Model fit was $P = 0.65$ by Hosmer–Lemeshow test and accuracy according with ROC analysis was 0.82 (95% CI 0.76–0.88).

Conclusion. BDG positivity is a strong predictor of poor outcome, but its accuracy for NAC infection may be suboptimal. Caution may be necessary for AT discontinuation based on a negative BDG result in patients at high risk for NAC infection.

Figure 1: Cox regression survival analysis accordin to index BDG result